

# SMT ANNUAL MEETING BALTIMORE 2007

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Wednesday, 14 November

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## MEETINGS

2:00-6:00 Executive Board Meeting (Executive Board Room)  
6:00-7:00 Executive Board, Awards Committee, Networking Committee, and  
Publications Committee Dinner (Guilford )  
7:00-11:00 Awards Committee Meeting (St. George)  
7:00-1:00 Networking Committee Meeting (Pride of Baltimore)  
7:00-11:00 Publications Committee Meeting (Gibson)

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Thursday, 15 November

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## MEETINGS, REGISTRATION, EXHIBITS

8:00-12:00 Executive Board Meeting (Executive Board Room)  
12:00-2:00 Officer's Lunch  
9:00-5:00 Registration (Maryland Foyer A)  
1:00-6:00 Exhibits (Maryland A)

## THURSDAY AFTERNOON SESSIONS

### 2:00-5:00 Performance and Body (Baltimore A)

Marianne Kielian-Gilbert (Indiana University), Chair

Eugene Montague (University of Central Florida), "Timing, Performance, and Embodied  
Meter in Two Preludes by J. S. Bach"

Jonathan Dunsby (Eastman School of Music), "The Grain of Panzéra's Voice: Analysis  
of Interpretation"

Michael Berry (Texas Tech University), "The Importance of Bodily Gesture in Sofia  
Gubaidulina's Music for Low Strings"

Gretchen C. Foley and Susan Levine (University of Nebraska-Lincoln), "Choreographing  
Perle: An Inter-Disciplinary Interpretation of Perle's String Quartet No. 5"

**2:00-5:00 Math to Music (Maryland E)**

Julian Hook (Indiana University), Chair

Sigrun B. Heinzelmann (Oberlin Conservatory), "Mapping Motives: The Parallel Universe of Step(-Class) Operations"

Steven Rings (University of Chicago), "A Tonal-Intervallic GIS and Some Related Transformational Systems"

Robert W. Peck (Louisiana State University), "Wreath Products in Transformational Music Theory"

Robert Morris (Eastman School of Music), "Some Musical Applications of Minimal Graph Cycles"

**2:00-3:30 Helmholtz and Hanslick (Baltimore B)**

Alexander Rehding (Harvard University), Chair

Benjamin Steege (SUNY-Stony Brook), "Helmholtz and Voice Culture: Just Intonation in Perspective"

Gavin Chuck (University of Michigan), "Hanslick's Musical 'Content' Reformulated: Perceptual Symbols and Musical Meaning"

**3:30-5:00 Paths to Jazz and Popular Song (Baltimore B)**

Daniel Harrison (Yale University), Chair

James McGowan (Laurentian University), "Extended Assemblies of Scale Degrees: Functional Implications of Jazz Chords"

Michael Buchler (Florida State University), "Personal and Tonal Transformations in Frank Loesser's 'My Time of Day'"

**MEETINGS AND EVENTS**

5:00-5:30 Conference Guides Meeting

5:30-7:30 Reception (Baltimore Foyer)

**THURSDAY EVENING SPECIAL SESSIONS**

**7:30-10:30 Pedagogy of Music Theory: Practicum and Discussion (Baltimore B)**

Sponsored by the Pedagogy Interest Group

Nancy Rogers (Florida State University), Moderator

Robert Gauldin (Eastman School of Music), Emeritus

Joseph Straus (City University of New York, Graduate Center)

Mary Wennerstrom (Indiana University)

## **7:30-10:30 Thickening the Discourse: Formalism in the Age of Meaning (Maryland E)**

Frank Samarotto (Indiana University), Moderator

Susan McClary (UCLA), “Frescobaldi’s Magdalene: Analyzing Counter-Reformation Structures”

Lauri Suurpää (Sibelius Academy), “Interactions and Tensions between Expression and Structure in the First Movement of Joseph Haydn’s G-Minor Piano Sonata, Hob. XVI/44”

Frank Samarotto (Indiana University), “Thick Formalism: Structure as Meaning in Brahms’s *Im Herbst*, Op. 104 #5”

Michael Cherlin (University of Minnesota), “*Mondestrunken*: Schoenberg’s Intoxicating Moonlight”

## **7:30-10:30 Theory, Meta-Theory, and Popular Music (Baltimore A)**

Sponsored by the Popular Music Interest Group

Ellie Hisama (Columbia University), Moderator

Fred Everett Maus (University of Virginia), “Conversations about Popular Music”

Akitsugu Kawamoto (Durham, North Carolina), “Theorizing the Variety of Intertextuality in Popular Music”

Mark Butler (University of Pennsylvania and the American Academy in Berlin), “Analyzing Performance in Popular Music: New Methodologies for Unstable Ontologies”

Andrew Robbie (Harvard University), “Multimodal Metatheory and the Structure of Music Video”

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## **Friday 16 November**

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### **MEETINGS, REGISTRATION, EXHIBITS**

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| 7:00-9:00  | SMT Breakfast Reception for Graduate Students, hosted by the Professional Development Committee (Homeland) |
| 7:00-9:00  | Committee on the Status of Women Breakfast Meeting (Pride of Baltimore)                                    |
| 8:30-5:00  | Registration (Maryland Foyer)  |
| 8:30-6:00  | Exhibits (Maryland A)  |
| 9:00-12:00 | Graduate Student Workshop “Analyzing Early Music” (St. George)   |
| 9:00-12:00 | Graduate Student Workshop “Sonata Theory” (Gibson)   |
| 9:00-12:00 | Interviews (Executive Board Room)  |

## FRIDAY MORNING SESSIONS

### 9:00-12:00 Structure and Signification in Late Tonality (Maryland E)

Kevin Korsyn (University of Michigan), Chair

Matthew Bribitzer-Stull (University of Minnesota), "From 'Nibelheim' to Hollywood:  
The Associativity of Harmonic Progression"

Michael Klein (Temple University), "Musical and Cultural Values in the Theory of  
Narrative Archetypes"

Howard Cinnamon (Hofstra University), "Equal Divisions of Musical Space and Form in  
Three Sonata-Form Movements from the Nineteenth Century"

Boyd Pomeroy (Georgia State University), "Visions of Heaven and Hell, Chromatic Ascents, and the  
Displaced *Ursatz*: The First Movement of Bruckner's Ninth"

### 9:00-12:00 Time-Beat-Form-Pop (Baltimore A)

Lori Burns (University of Ottawa), Chair

Fernando Benadon (American University), "Bend It Like Bubber: Miley's Time in  
'Creole Love Call'"

Chris Stover (University of Washington), "Construing Rhythmic Spaces in Diasporic  
African Music"

Christopher Endrinal (Florida State University), "Burning Bridges: Defining the Interverse Using the  
Music of U2"

Jonathan R. Pieslak (The City College-CUNY), "Re-Casting Metal: Popular Music Analysis Goes  
Meshuggah"

### 9:00-12:00 Post-Tonal Sonorities (Baltimore B)

Christoph Neidhöfer (McGill University), Chair

Andrew Pau (City University of New York, Graduate Center), "Voice Leading as  
Harmonic Determinant in Atonal Music"

Jeannie Ma. Guerrero (Eastman School of Music), "*Ludus Hindemithensis*: Serial  
Reckonings Behind Nono's *Polifonica-Monodia-Ritmica* (1951)"

Steve Voigt (Brooklyn, New York), "Post-Serial Organization in Late Works by Boulez"

Robert Hasegawa (Harvard University), "Gérard Grisey and the Nature of Harmony"

## NOONTIME MEETINGS

12:15-2:00 Jazz Interest Group Meeting (St. George)

12:15-2:00 Scholars for Social Responsibility Meeting (Gibson)

12:15-2:00 Mathematics of Music Analysis Interest Group Meeting (Executive  
Board Room)

1:00-3:00 CV REVIEW (coordinated by the Professional Development  
Committee) (Pride of Baltimore)

2:00-5:00 Interviews (Executive Board Room)

## **FRIDAY AFTERNOON SESSIONS**

### **2:00-4:00 Sexual Harassment in the University Workplace (Baltimore A)**

Sponsored by the Committee on the Status of Women

#### **Daniel Sonenberg (University of Southern Maine), Moderator**

Brenda Ravenscroft (Queen's University, Kingston)

Elizabeth West Marvin (Eastman School of Music)

Sarah Warbelow (American Association of University Women)

Michele McDonald (Maryland Office of the Attorney General)

### **2:00-5:00 Tonal Art and Craft (Maryland E)**

Charles J. Smith (University at Buffalo), Chair

Robert Gjerdingen (Northwestern University), "The Discovery of Cimarosa's Neapolitan Lesson Book (1762: Age 13)"

Mark Anson-Cartwright (Queens College-CUNY), "Modulation to the Minor Dominant in Major: Three Examples by Bach"

Roman Ivanovitch (Indiana University), "Mozart's Art of Retransition"

Nicole Biamonte (University of Iowa), "Chopin's E-minor Prelude and Bach's 'Crucifixus'"

### **2:00-3:30 Bartók's Arpeggios (Baltimore B)**

David Clampitt (Yale University), Chair

Edward Gollin (Williams College), "Serial Structure, Transformation, and the Manuscript Revisions of Bartók's 'Divided Arpeggios'"

José Oliveira Martins (University of Iowa), "Affinity Spaces: Medieval Conceptions in the Analysis of Twentieth-Century Music"

### **3:30-5:00 Chromatic Collisions (Baltimore B)**

Timothy Jackson (University of North Texas), Chair

John Turci-Escobar (Washington University in St. Louis), "Of Thwarted and Clashing Tones: Gesualdo's Chromaticism Revisited"

Blair Johnston (University of Michigan), "Maximally Rough, and Loving It: Appreciating Expressive Hyperdissonance in the Early 20<sup>th</sup> Century"

## **MEETINGS**

5:00-7:00 Queer Resource Interest Group Meeting (St. George)

5:00-7:00 Music Philosophy Interest Group Meeting (Gibson)

## FRIDAY EVENING SPECIAL SESSIONS

### **7:30-10:30 Presenting at a Conference (Baltimore A)**

Sponsored by the Committee on Professional Development

Maureen A. Carr (Pennsylvania State University), Moderator

Taylor Greer (Pennsylvania State University), “The Program Selection Process”

Joseph Straus (City University of New York, Graduate Center), “Writing a Successful Proposal”

Ellie Hisama (Columbia University), “Organizing a Special Session”

Julian Hook (Indiana University), “Communicating Technical Material Clearly”

Janet Schmalfeldt (Tufts University), “Tips for a Successful Presentation”

### **7:30-10:30 Deterritorializing Music Theory: Deleuze, Guattari, and *A Thousand Plateaus* (Maryland E)**

Sponsored by the Music Philosophy Interest Group

Alan Street (*Music Analysis*/University at Buffalo), Moderator

John Rahn (University of Washington), “*Mille Plateaux*, You Tarzan: A Musicology of  
(an Anthropology of (an Anthropology of *A Thousand Plateaus*))”

Michael Gallope (New York University), “Immanence, Transcendence, and the Musical  
Work in *A Thousand Plateaus*”

Martin Scherzinger (Eastman School of Music), “‘Deterritorializing the Refrain’: Music  
As Philosophical Critique”

Amy Cimini (New York University), “Voice, Aurality, Ontology: Locating the Sonic in  
*A Thousand Plateaus*”

Benjamin Boretz (Bard College), “On the 1001<sup>st</sup> Plateau”

### **7:30-10:30 An Introduction to Geometrical Music Theory (Baltimore B)**

Dmitri Tymoczko (Princeton University), Moderator

Dmitri Tymoczko (Princeton University), Clifton Callender (Florida State University)  
and Ian Quinn (Yale University), “Generalized Set Theory”

Clifton Callender (Florida State University), Ian Quinn (Yale University) and Dmitri  
Tymoczko (Princeton University), “Geometrical Chord Spaces”

Rachel W. Hall (Saint Joseph’s University) and Dmitri Tymoczko (Princeton University),  
“Measuring Voice Leadings”

Ian Quinn (Yale University), “Fourier Space and Voice-Leading Space”

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**Saturday 17 November**

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**MEETINGS, REGISTRATIONS, EXHIBITS**

- 7:00-9:00 Regional and Affiliate Societies Breakfast Meeting (Gibson)  
7:00-9:00 Disability and Music Interest Group Meeting (Executive Board Room)  
7:00-9:00 Professional Development Committee Breakfast Meeting (St. George)  
7:00-8:30 Diversity Committee Breakfast Meeting (Pride of Baltimore)  
8:30-5:00 Registration (Maryland Foyer A)  
8:30-6:00 Exhibits (Maryland A)  
9:00-12:00 Interviews (Pride of Baltimore)

**SATURDAY MORNING SESSIONS**

**9:00-11:00 Ethnic Diversity in Music Theory: Voices from the Field (Baltimore A)**  
Sponsored by the Diversity Committee

Jeannie Ma.Guerrero (Eastman School of Music), Moderator

YouYoung Kang (Scripps College)  
Sumanth Gopinath (University of Minnesota)  
Jairo Moreno (New York University)  
Horace Maxile (University of North Carolina-Asheville)

**9:00-12:00 Meter (Maryland E)**

Scott Murphy (University of Kansas), Chair

Zachary Cairns (Eastman School of Music), "Juggling Twos and Threes"  
David Temperley (Eastman School of Music), "Hypermetrical Transitions"  
Daphne Leong (University of Colorado-Boulder), "Metric Symmetries, States, and  
Spaces: Humperdinck and Wagner"  
Benjamin Carson (University of California-Santa Cruz), "Perceiving and  
Distinguishing Simple Timespan Ratios without Metric Reinforcement"

**9:00-12:00 Engaging Early Music (Baltimore B)**

Peter Schubert (McGill University), Chair

Richard Porterfield (City University of New York, Graduate Center and Mannes  
College), "Melodic-Functional Analysis of Gregorian Chant"  
Jennifer Bain (Dalhousie University), "'Messy Structure'? Multiple Tonal Centers in the  
Music of Machaut"  
Jared C. Hartt (Oberlin Conservatory), "Rehearing Machaut's Motets: Taking the Next  
Step in Understanding Sonority"  
Matthew Royal (Brock University), "The Rhythmics of Francisco Salinas: A True  
Rebirth of Greek Musical Thought"

## LUNCHEON AND MEETINGS

- 12:00-1:30 Music Cognition Interest Group Meeting (Gibson)  
12:00-1:30 Committee on the Status of Women Affiliates Lunch Meeting (St. George)

## SATURDAY AFTERNOON SESSIONS

### **1:30-3:30 Plenary Session: Issues in Music Cognition (Baltimore Ballroom)**

Elizabeth West Marvin (Eastman School of Music), Organizer and Chair

Carol Krumhansl (Cornell University), "Music Cognition: Influences of Music Theory on a Developing Discipline"

Fred Lerdahl (Columbia University), "Collaborations in Pursuit of Tonal Tension"

Laurel Trainor (McMaster University), "Musical Origins: Early Competencies, Acquisition, and Effects of Musical Experience on the Brain"

David Huron (Ohio State University), "Applying Cognitive Science to Music Analysis: A Case Study of Musically-Evoked Laughter"

### **3:45-4:00 SMT Awards Presentation (Baltimore Ballroom)**

### **4:00-5:30 SMT Business Meeting (Baltimore Ballroom)**

## EVENING MEETINGS

- 5:30-6:30 Music Informatics Interest Group Meeting (St. George)  
5:30-6:30 Music Theory Pedagogy Interest Group Meeting (Pride of Baltimore)  
5:30-6:30 Popular Music Interest Group Meeting (Gibson)  
7:00-8:00 Oxford University Press Reception (Watertable Ballroom)

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## SUNDAY 18 NOVEMBER

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## MEETINGS, REGISTRATION, EXHIBITS

- 7:00-9:00 2007/2008 Program Committees Breakfast Meeting (St. George)  
8:15-9:00 Interest Group, Standing Committee and Program Committee Chairs  
Breakfast Meeting (Gibson)  
8:30-12:00 Registration (Maryland Foyer A)  
8:30-12:00 Exhibits (Maryland A)



## SUNDAY MORNING SESSIONS

### 9:00-12:00 Form and Fragment in Early Nineteenth-Century Music (Maryland E)

Deborah Stein (New England Conservatory), Chair

L. Poundie Burstein (Hunter College and City University of New York, Graduate Center), "Covering the Traces: Op. 81a and Beethoven's Treatment of Form"

Jeff Perry (Louisiana State University), "A Fragmentary Lament: Schubert's 'Aus Goethe's *Faust*, D. 126"

Peter H. Smith (University of Notre Dame), "Harmonies Heard from Afar: Tonal Pairing, Formal Design, and Cyclical Integration in Schumann's A-minor Violin Sonata, Op. 105"

Austin T. Patty (Lee University), "The Influence of Harmonic Rhythm and Melodic Pacing on Musical Climax with Particular Attention to Brahms's A-Major Violin Sonata"

### 9:00-12:00 Juxtapositions in Early Twentieth-Century Music (Baltimore B)

Mark DeVoto (Tufts University), Chair

Matthew McDonald (Northeastern University), "Automated Rhythm in *The Rite of Spring*

Benjamin Wadsworth (Eastman School of Music), "Dialectical Opposition between Tonal and Atonal Structures in Berg's Piano Sonata

L. Christine Amos (SUNY-Potsdam), "Resolving the Debate on Milhaud's Polytonality"

Deborah Rifkin (Ithaca College), "The Quiet Revolution of a B-natural: Prokofiev's *New Simplicity* in the Second Violin Concerto"

### 9:00-10:30 Evolutionary Theory (Baltimore A)

Lawrence Zbikowski (University of Chicago), Chair

Dora A. Hanninen (University of Maryland), "Species Concepts, Association Concepts, and Music Analysis

Richard Cohn (Yale University), "The Over-Determined Triad, Evolution, and Cognitive Plausibility

### 10:30-12:00 Intelligent Design (Baltimore A)

Jane Clendinning (Florida State University), Chair

Amy Bauer (University of California-Irvine), "The Rule of the Canon in Ligeti's *Études pour Piano* (1985-2001

Stephen Slottow (University of North Texas), "Carl Ruggles and Charles Seeger: Strict vs. Free Imitation in Ruggles's Canons

# ABSTRACTS

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Thursday Afternoon, 15 November

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## PERFORMANCE AND BODY

Marianne Kielian-Gilbert, Indiana University, Chair

### TIMING, PERFORMANCE, AND EMBODIED METER IN TWO PRELUDES BY J. S. BACH

Eugene Montague  
University of Central Florida

The human performance of music, whether in public or private, involves a complex series of interactions that interweaves the intentions and bodily movements of a player with sound both imagined and actual. Music theory sometimes shies away from the full force of this complexity, preferring, if only for reasons of simplicity, to limit its investigations to issues of sonic structure. As a step toward a coherent approach to performance that takes into account its inherent complexity, this paper develops a concept of meter that integrates sound with bodily movement. This concept, which I term embodied meter, defines a particular type of metrical experience, available to a performer in pieces where the physical movements of the player establish repetitive gestures. In exploring this concept, the paper demonstrates that the perspective of a performer offers useful insights into the theoretical problems of meter. I also introduce methodology to incorporate movement into written analysis and, through discussion of the D major and C minor preludes from Book 1 of J. S. Bach's *Well-Tempered Clavier*, show that the engagement of a player's body with sound constitutes a rich level of musical meaning.

### THE GRAIN OF PANZÉRA'S VOICE: ANALYSIS OF INTERPRETATION

Jonathan Dunsby  
Eastman School of Music

Roland Barthes' "grain of the voice" has caught the imagination of many commentators since 1972. Musicians have been aware of its origin in Kristeva's idea of the "genotext," but nobody has pursued Barthes's volcanic idea by investigating the material he was actually talking about, interpretations by Panzéra and the "grain"-less Fischer-Dieskau (Lise Helmer Petersen's pioneering work on this in Danish will be acknowledged.) I analyze selections from Panzéra's recordings of both French and German song, and from his writings, to try to capture the "grain" concept in a way that is meaningful for music analysis, the central research question being: to what extent may we discern a difference between the embodied voice and the practice of singing? Methodologically, I rely on the standards of "canonicity" and "instance" theorized elsewhere. There is indeed a level at which we can claim to understand in our way, as theorists, the basis of Panzéra's interpretive, "phenotextual"

decision-making. Thus Barthes' epistemological premise stands the test of time, and I recommend that it be valued and developed as a method, not merely an aesthetic. There is the opportunity too to make a dispassionate comparison, even though this was not Barthes' point, of Panžera's and Fischer-Dieskau's equally extraordinary interpretations, through "Ich will meine Seele tauchen" (*Dichterliebe*).

## THE IMPORTANCE OF BODILY GESTURE IN SOFIA GUBAIDULINA'S MUSIC FOR LOW STRINGS

Michael Berry  
Texas Tech University

The role of the body in musical performance has recently received quite a lot of study. In most cases, the gesture is seen as subservient to the sound it creates: this is also the case in linguistic studies of gesture—the gesture usually “accompanies” the speech act, placing the visual second to the aural. Instrumental music in the twentieth century has seen an increase in the importance of the body in performance. Many works incorporate (either directly or indirectly) an element of theatricality in addition to the purely sonic content. Sofia Gubaidulina is one of many composers whose music features an increased attention to the body. In some passages of her compositions, practical bodily gestures—those movements of the body that are concerned with producing sound from one's instrument—are actually more important to the work than the resulting sounds. In this paper, I examine some of these passages with a particular focus on Gubaidulina's writing for cello and double bass.

The first part of the paper offers a brief overview of gestural studies in music and linguistics in an effort to develop some terminology for use in the analyses. The second part provides examples of gestural symbolism in a number of Gubaidulina's works for low strings. Inversionally symmetrical sets like (012) and (048) are prominent in many of Gubaidulina's works and are often deployed as symbols of the cross. The final part of my paper examines Gubaidulina's silent works—those in which gestures are prescribed but no sound results—and offers some directions for further study.

## CHOREOGRAPHING PERLE: AN INTER-DISCIPLINARY Interpretation of Perle's String Quartet No. 5

Gretchen C. Foley and Susan Levine  
University of Nebraska-Lincoln

This presentation takes its place in the line of recent scholarship relating analysis and performance of musical works, but propels that research in a new direction: the performer in this case is a choreographer of contemporary dance. Dance combined with music is a venerable tradition in our culture. Yet many scholars and performers of music often harbor suspicions that setting dance to music not specifically composed for such a purpose detracts from the music itself.

In this paper we explore how familiarity with Perle's twelve-tone tonality impacts the choreographer of Perle's String Quartet No. 5. We introduce the basic building blocks of Perle's compositional theory (interval cycles, inversional symmetry, cyclic sets, arrays and array segments, and modulation by substitution or reinterpretation). We then describe the means by which the analyst conveys these concepts to the choreographer, utilizing specific analogies with dance formations and

stage terminologies.

Although experienced choreographers are comfortable working with relational concepts shared by dance and music (e.g., cycles, symmetry, canon, inversion, retrograde), most describe “making a dance” not as a process of analytical realization *per se*, but one that is much more intimate and intuitive. Hence the approach to choreographing Perle’s music informed by a Perlean analysis of the same is rather unconventional.

The paper continues with a detailed analysis of Perle’s String Quartet No. 5 from the perspective of twelve-tone tonality, with the choreographer providing demonstrations of dance movements designed to correlate with the analysis. The paper describes the extent to which the relationships in twelve-tone tonality in general, and in this work in particular, are made explicit in the dance. What emerges is a multi-faceted work of art, whose integrated layers of music and dance may be apprehended both aurally and visually.

## **MATH TO MUSIC**

**Julian Hook, Indiana University, Chair**

### MAPPING MOTIVES: THE PARALLEL UNIVERSE OF STEP(-CLASS) OPERATIONS

Sigrun B. Heinzelmann  
Oberlin Conservatory

The paper introduces new analytical tools that use the concepts of *step* and *step class* as analogues to *scale degree* and *pitch class* to define motivic transformations. This approach yields a whole new universe of possible applications as numbered steps can be mapped onto a variety of referential collections (e.g., the diatonic or octatonic). While the resulting flexibility is especially useful for early 20<sup>th</sup>-century music, the approach applies well to all kinds of modal, tonal, and post-tonal repertoire. Building on Matthew Santa’s concept of *modular transformation*, I define eight types of motivic transformations and illustrate them with examples from Bach to Bartók. To address the problem of octave equivalence in modular spaces, I expand the number of the four pitch-based interval types (ordered/unordered, pitch/pitch-class intervals) to eight types of step-based intervals.

In addition, I demonstrate a new visual representation of motivic transformation that is intuitive, can show pitch as well as rhythm transformations, and reflects intervallic distances more precisely than our diatonic-based music notation. Applying these analytical tools to complex examples drawn from Ravel’s chamber music, I relate the motivic transformations to formal processes (such as the sonata form of the first movement of the String Quartet), and to inter-movement connections between the first themes of the four movements of the Piano Trio. Finally, I suggest how we can incorporate the concept of step(-class) into a Schenkerian-derived model for voice leading in certain non-diatonic collections.

### A TONAL-INTERVALLIC GIS AND SOME RELATED TRANSFORMATIONAL SYSTEMS

Steven Rings  
University of Chicago

One of the characteristic things we do when we hear tonally is to hear sounding pitches “as” scale degrees (a phenomenon explored by Mark DeBellis and others). That is, in a tonal context we

might hear a given pitch (an acoustic entity) as, say,  $\hat{5}$  (an ideal category or perceptual *quale*). The result is a fused esthetic structure, part raw sonic fact, part mental representation. Our experience of interval in tonal music arguably obtains between such fused esthetic structures—that is, between sounding entities heard as scale degrees.

This paper presents a direct-product GIS designed to model such intervals. The GIS is formally simple but conceptually rich. It illuminates a host of familiar tonal phenomena, including: consonant, dissonant, and enharmonically equivalent intervals; modulation and pivot chords; diatonic (tonal) and chromatic (real) transposition and inversion; and chromatic alteration of diatonic scale degrees. Two “exotic” species of interval in IVLS are of particular interest: those that indicate a change of scale degree with no change of acoustic signal (as found in pivot chords or enharmonic reinterpretations); and those that indicate a change in acoustic signal with no change in scale degree (as found in chromatic alterations). The GIS interacts with and extends existing transformational methodologies (such as neo-Riemannian theory), allowing such approaches to provide a richer account of the tonal kinetics of the music under study.

The GIS’s analytical potential is illustrated in passages from Bach, Mendelssohn, Liszt, Wagner, and Mahler.

## WREATH PRODUCTS IN TRANSFORMATIONAL MUSIC THEORY

Robert W. Peck  
Louisiana State University

Wreath products are familiar structures in mathematics, but they are relatively new to music theory. This study proposes a further investigation into the musical relevance of wreath products, drawing on examples from selected musical literature of the nineteenth and twentieth centuries. We begin by examining the notion of permutation isomorphism, as it applies to the action of a group on its orbit restrictions. Next, we define a direct product of the orbit restrictions. Finally, we allow a permutation of orbit restrictions, as a result of their particular structural identity, which yields the wreath product. We include examples from Robert Schumann's "Im wunderschönen Monat Mai," from *Dichterliebe*, op. 48; Richard Wagner's *Siegfried*; and Anton Webern's *Cantata*, op. 29. Finally, we consider some larger wreath products. One such group, of size 4608, includes as subgroups most of the important transformation groups in the standard music-theoretical literature, including those described in Hyer (1995), Hook (2002), Kochavi (2002), and Lewin (2003).

## SOME MUSICAL APPLICATIONS OF MINIMAL GRAPH CYCLES

Robert Morris  
Eastman School of Music

In recent music theory, graphs—nodes connected by (possibly labeled) arcs or arrows—have become an important tool for modeling the structure of music, musical structures, and composition systems. Transformational networks, compositional spaces, K-nets, Perle cycle-sets, the *Tonnetz*, voice leading spaces, and canon graphs are examples. The paper examines an important property of such graphs, the number and content of a graph's minimal cycles. This is a useful way to characterize a graph especially when it is complex and its visual presentation is too convoluted to provide much insight into its form and properties. Moreover, minimal cycles can provide ways to compare the musical entities modeled by graphs and assess their similarity.

We begin with the construction of graphs from relations and enumerate the resulting graph's minimal cycles using a computer-implemented algorithm. We then apply the study of minimal cycles to issues in (1) twelve-tone theory, (2) K-nets, (3) two-partition graphs, (4) voice-leading graphs, and (5) “tune families” extracted from actual compositions or from various modal/tonal theories including Indian music. The paper ends with some thoughts on how minimal cycles might be implicated in models of musical cognition and memory.

## HELMHOLTZ AND HANSLICK

Alexander Rehding, Harvard University, Chair

### HELMHOLTZ AND VOICE CULTURE: JUST INTONATION IN PERSPECTIVE

Benjamin Steege  
SUNY-Stony Brook

This paper reconsiders Hermann von Helmholtz's arguments for just intonation, famously rejected by Hugo Riemann, and discusses their place within a larger project toward *reforming* vocal and aural practices associated with musical performance. Not only did Helmholtz explicitly align his music theoretical proposals with the vocal pedagogy of English reformist minister and pedagogue John Curwen, but both men's broader projects also figured centrally within similar reform efforts in language pedagogy, phonetics, and philology. Such efforts were central to the emergence of mass bourgeois culture in Germany, England, and even across the British Empire. This popularizing impulse in Helmholtz and Curwen must be seen as marked by a desire to liberate everyday perception from stultifying habit, and to transform previously marginal aural sensations (upper partials, beats, combination tones) into public objects of common, popular knowledge. Examining the network of cultural practices linking Helmholtz's and Curwen's projects—e. g., vowel quality research, laryngoscopy, and *a cappella* choral singing—this paper ultimately seeks to acknowledge how Helmholtz's musical foray went beyond “mere” theory to envision material changes in how nineteenth-century individuals might relate to their own bodies.

### HANSLICK'S MUSICAL “CONTENT” REFORMULATED: PERCEPTUAL SYMBOLS AND MUSICAL MEANING

Gavin Chuck  
University of Michigan

Hanslick's thesis—that the *content* of music is equivalent to “tonally moving forms”—embodies a structural tension because the terms “content” and “form” have been conventionally understood as opposites. His tactic in *Vom Musikalisch-Schönen* is to use the notion of content as a kind of wedge issue to separate music from other forms of expression, creating a unique epistemological space for music as an object of Beauty, suited only to aesthetic investigation. If the thesis has an iconic, manifesto-like ring, it is because it resonates deeply with long-held assumptions about the dualistic relationship of content and form.

These assumptions about form and content also have turned out to be problems in the field of psychology. Indeed, the notion of perceptual symbols recently developed by Lawrence Barsalou shares

much of Hanslick's critique of representation. Barsalou proposes that abstractions are implemented in the same neural architecture as sensorimotor information, theorizing a continuity (rather than a dichotomy) between percept and concept. The implications for theories of musical meaning are strong: music cognition is as much perceptual as conceptual, after all. It is on this point that there can be contact between the 19<sup>th</sup>-century music critic's ideas and current cognitive science, suggesting a productive reformulation of Hanslick's formalism and other formalist traditions within the field of music. The paper thus will take Hanslick's influential philosophy as a point of departure, one whose currency in our field will allow for an important leap to another field that shares our concerns. As a reevaluation of formalism, the paper will demonstrate how perceptual symbol systems can be the ground of a shared epistemological space (rather than the unique one proposed by Hanslick) that allows for musical ideas to participate in more general discourse about the nature of concepts, representation, meaning, and the mind.

## **PATHS TO JAZZ AND POPULAR SONG**

**Daniel Harrison, Yale University, Chair**

### EXTENDED ASSEMBLIES OF SCALE DEGREES: FUNCTIONAL IMPLICATIONS OF JAZZ CHORDS

James McGowan  
Laurentian University

Building upon a revisionist theory of Riemannian function by Daniel Harrison, this paper adapts the theory of *assemblies of scale degrees* to account for harmonic extensions. Four-note chords are the norm in tonal jazz, even for stable Tonic harmony, and a theory based on triads does not adequately account for a functional interpretation of this music.

This paper adapts Harrison's principle of *functional attitude* for jazz harmony such that two kinds of agents are identified: "modal agent" (the third of a primary triad) and "dialect agent" (the sixth or seventh of a primary triad). In contrast to these functionally active tones, associates are more passive; this paper identifies three kinds of associates: "triadic associate" (the fifth of a primary triad), "suffix associate" (the ninth of a primary triad), and "Lydian suffix" (typically the #11<sup>th</sup> of a primary triad). The paper then addresses some additional considerations with analytical examples: chromatic modifications—associates modified to become agents, tritone substitutions, and Blues-specific chromaticism—and voice leading via *functional discharge* with extensions. The presentation argues that using extended scale-degree assemblies gives the listener/analyst a stronger contextual sense of harmonic tension and resolution, and a richer, functional listening experience.

### PERSONAL AND TONAL TRANSFORMATIONS IN FRANK LOESSER'S "MY TIME OF DAY"

Michael Buchler  
Florida State University

"My Time of Day" is one of the most beautiful yet least-known songs in *Guys and Dolls* (1950), a show replete with popular favorites. Why it failed to make *Your Hit Parade* is no great mystery: in only twenty-nine bars, this song touches upon six different keys. These extraordinary tonal shifts as well as a lack of repetition portray a man (Sky Masterson) who had been happy and confident but who is re-

evaluating his life, exposing—and coming to terms with—his frailties and desires. This talk provides a structural and narratological analysis that particularly focuses on the dramatic role of modulation.

In addition to a close reading of the music and text of “My Time of Day,” I will briefly discuss Joseph Mankiewicz’s cinematic rendition of *Guys and Dolls* (1955), which omits this song and the duet “I’ve Never Been In Love Before” in favor of a new song: “A Woman in Love.” I will suggest that what is often referred to as a simple substitution to accommodate Marlon Brando’s vocal limitations has far broader dramatic consequences, substantially changing the narrative and the character of Sky Masterson.

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### Thursday Evening, 15 November

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#### SMT SPECIAL SESSION PEDAGOGY OF MUSIC THEORY: PRACTICUM AND DISCUSSION

Pedagogy Interest Group  
Nancy Rogers, Florida State University, Moderator

Robert Gauldin, Eastman School of Music, Emeritus  
Joseph Straus, City University of New York, Graduate Center  
Mary Wennerstrom, Indiana University

The overwhelming majority of SMT’s membership—from full professors to graduate students, from historians of theory to popular music analysts—teaches music theory at the collegiate level. There is perhaps nothing that unites us more, except the love of music itself. This special session allows SMT members at significantly different stages in their careers to focus on the activity that is most central in our professional lives.

The session will begin with a series of model teaching demonstrations, during which teachers will interact with a small class of undergraduate music majors. Their focus will be on a variety of topics typically addressed within the core undergraduate music theory curriculum (including both aural and written skills). Following each model teaching demonstration, a distinguished panel of noted pedagogues (including recipients of the Gail Boyd de Stwolinski Prize for Lifetime Achievement in Music Theory) will provide expert feedback. For the remainder of the session, attendees will break into small groups to discuss good pedagogical practices and exchange practical advice.

#### SMT SPECIAL SESSION THICKENING THE DISCOURSE: FORMALISM IN THE AGE OF MEANING

Frank Samarotto, Indiana University, Moderator

The emergence of the modern music theorist in post-war America is inextricably tied to a wholesale embrace of objective rigor, an objectivity whose pursuit explicitly demanded the expunging of all talk of meaning, expression, metaphor, indeed all that could not be certified by formalist argument. Much stricture has been relaxed since then, but, nonetheless, meaning’s place at the table is still negotiable. Does meaning derive primarily from cultural context and personal interpretation? Is structure simply a vessel for the conveyance of meaning? Should formalists regard the interpretation of meaning as an extracurricular activity not genuinely part of serious musical analysis?



These four papers, which range in historical scope from the early seventeenth century to the early twentieth, share a conviction that musical structure is inseparably linked to meaning and present a variety of perspectives on how the discourse of music theory could be “thickened” to describe structure’s expressive potentials. All share the aim of asserting that a discourse of meaning is not only legitimately a part of formalism but in fact inevitably a consequence of structural analysis.

## FRESCOBALDI’S MAGDALENE: ANALYZING COUNTER-REFORMATION STRUCTURES

Susan McClary  
UCLA

Music of the first half of the seventeenth century continues to pose analytical problems. No longer responsive to principles of Renaissance modality and only occasionally hinting at procedures later theorized as harmonic tonality, this repertory languishes in a gap between available formal approaches. Yet composers and listeners in the 1600s did not consider their music transitional; if it refuses to yield to our analytical methods, then perhaps it demands other approaches—ones that take into account relevant cultural agendas as well as the formal constructions designed to satisfy specific needs.

This paper focuses on a *sonetto spirituale*, Girolamo Frescobaldi’s “Maddalena alla Croce” (1630). The organist at the Vatican, Frescobaldi provided music to further the interests of the Counter-Reformation (compare Bernini’s St. Teresa in Ecstasy). But the fact that Frescobaldi’s monody must be understood within its historical context does not mean that its formal details cease to matter.

A thick description—one that brings together Counter-Reformation politics, Spanish mysticism, the experiments of *seconda prattica* composers, and the salient formal details of this composition—can help us grasp not only some of the priorities of seventeenth-century music but also the reasons why these composers were in no hurry to discover tonality.

## INTERACTIONS AND TENSIONS BETWEEN EXPRESSION AND STRUCTURE IN THE FIRST MOVEMENT OF JOSEPH HAYDN’S G-MINOR PIANO SONATA, HOB. XVI/44

Lauri Suurpää  
Sibelius Academy

This paper analyzes the first movement of Joseph Haydn’s G-minor Piano Sonata, Hob. XVI/44 (ca. 1770). The analysis includes two broad and ultimately intertwined areas. First, the movement’s expressive or narrative aspects are examined on two levels. The broad level is studied by applying Robert Hatten’s notion of “expressive genre.” At more local levels certain notions of rhetoric are used, specifically figures described in Johann Adolf Scheibe’s *Critischer Musikus* (1745). Scheibe himself emphasizes the expressive function of figures, so it seems justified to apply his ideas in examining the local level of the movement’s expression. The second broad area of analysis enlightens the formal-structural aspects. The large-scale formal layout is approached from the perspective of Sonata Theory by James Hepokoski and Warren Darcy and the phrase-structural organization from the perspective of formal functions by William Caplin. The music’s harmonic-linear unfolding and metrical structure are examined from the Schenkerian perspective. The paper argues that the expressive aspects of the G-minor Sonata’s opening movement are closely related to its structure.

THICK FORMALISM: STRUCTURE AS MEANING IN  
BRAHMS'S *IM HERBST*, OP. 104 #5

Frank Samarotto  
Indiana University

Within the discourse we call music theory, talk of meaning is now more commonly accepted. Nonetheless, one question remains: Are musical structure and musical meaning inherently opposed? For some, “structure” entails necessarily a kind of neutrality, an inert framework into which “meaning” is placed. For others structure itself is automatically meaningful, even without semantic referent.

This paper will propose an attitude that I will call *thick formalism*, a term adapted from Clifford Geertz's *thick description*, which viewed the study of culture as an inherently creative act enmeshed in subjective immediacies. Thick formalism encompasses the rigor of structural analysis, but only as a first stage that must lead to a richer, “thicker” description of the structure's internal dynamic.

To render this attitude more concrete, the bulk of this paper will set out a particularly acute example where structural materials themselves are foregrounded as the sources of meaning. Brahms's late setting of Klaus Groth's poem *Im Herbst* reassesses the basic syntax of his musical language to render it acutely expressive. This centers on three processes: the *cyclical*, the *progressive*, and the *spiral*; for each of these, Brahms shapes basic structural metaphors. This extreme case will illustrate that structure does not limit meaning, but expands it exponentially.

MONDESTRUNKEN: SCHOENBERG'S INTOXICATING MOONLIGHT

Michael Cherlin  
University of Minnesota

Our point of departure will be the opening ostinato in the first song of Schoenberg's *Pierrot lunaire*. We begin by identifying the most salient formal and expressive aspects of the ostinato—its steady-state pulse stream, the tonal residues of its underlying voice leading, and its expression of uncanny cascades of intoxicating moonlight, a synæsthetic fusion of light and liquid (*den Wein den Mann mit Augen trinkt*). Our discussion of the imagery in Schoenberg's song (and the Giraud/Hartleben text) opens onto a succinct exploration of the pervasive association of moonlight with the uncanny in Romantic art and literature. All of this sets up the main body of the paper, comprising three parts. The first is a survey and discussion of the musical topos of moonlight, ranging through Schoenberg's most significant precursors. We then discuss Schoenberg's depictions of moonlight in key works prior to *Pierrot*, including *Verklärte Nacht*, *Gurrelieder*, *Pelleas und Melisande*, and *Erwartung*. The third and final section of the paper returns to our point of departure, the ostinato in *Mondestrunken*, as we more fully explore the structural and expressive role of the ostinato in the context of the song.

SMT SPECIAL SESSION  
THEORY, META-THEORY, AND POPULAR MUSIC

Popular Music Interest Group  
*Ellie Hisama, Columbia University, Chair*

As the theoretical and analytical study of popular music has matured, it has continually expanded. This process has generated many questions regarding not merely what music to study, but also the nature and even the value of such study itself. How are meanings created, transmitted, and understood in the many stylistic worlds of popular music? How does intertextuality operate? How does one analyze live performances or music videos? What can analysis of popular music tell us about what is most essential to understanding it? And, perhaps most importantly, how do we do our work, and should we even be doing it in the first place? In *Theory, Meta-Theory, and Popular Music*, the SMT Popular Music Interest Group has invited a panel of creative popular music scholars who will begin to answer these kinds of questions and then critically evaluate their answers.

CONVERSATIONS ABOUT POPULAR MUSIC

Fred Everett Maus  
University of Virginia

This paper is about “methodology” of popular music analysis in that it explores broad motivations and goals of such writing, along with research and writing strategies in relation to those goals. The paper moves through five sections. (1) I describe my longstanding understanding of the goals and methods of analysis of classical music as an articulation and development of individual musical experience. (2) Similar goals and methods may be less appropriate for interpretation of popular music. (3) Philip Tagg’s recent work offers an excellent alternative approach to interpretation and analysis of popular music, experience-based but originating outside the subjectivity of the individual analyst. (4) However, there are substantial difficulties in reproducing the elaborate research methods of Tagg’s recent book; I describe an adaptation exemplified by Tagg himself in his teaching. Tagg’s classroom practices have also led to a type of discussion meeting among graduate students and faculty, now a recurring part of research in my home university; I describe these meetings. (5) I have used the adapted version of Tagg’s method in my own work, as I illustrate with discussion of a song by R.E.M.

THEORIZING THE VARIETY OF INTERTEXTUALITY IN POPULAR MUSIC

Akitsugu Kawamoto  
Durham, North Carolina

Popular music is rich in intertextuality. Covers, fakes, quotations, imitations, allusions, tributes, remixes, and samplings are all its manifestations, in which intertexts are presented in a variety of ways: obviously or ambiguously, ironically or sincerely, etc. Yet, such a variety has rarely been sorted out theoretically. To begin with, there are far fewer theoretical studies on intertextuality in popular music than on internal tonal relations, or, *intratextuality*, in individual songs. The few analyses of pop’s intertextuality generally examine obvious intertexts only. And some recent researches that do distinguish obvious and ambiguous intertexts offer no analytical criteria for the distinction.

In order to theorize the variety of intertextuality in popular music, this paper proposes the concepts “sharp (obvious) intertextuality” and “subtle (ambiguous) intertextuality” as poles of a continuum determined by the following three criteria: convergency (strategic/stylistic), perceptibility (foreground/middleground), and consistency (repeated/recontextualized) of intertext. A number of musical examples from across different genres of popular music will be examined and located along this continuum. I will suggest that musical intertextuality is not a monolith and that further analytical attempts to categorize various kinds of intertextuality along this and other continuums would elucidate further the richness of popular music practices.

## ANALYZING PERFORMANCE IN POPULAR MUSIC: NEW METHODOLOGIES FOR UNSTABLE ONTOLOGIES

Mark Butler

University of Pennsylvania and the American Academy in Berlin

Conventionally, we conceptualize musical ontology in terms of relations between performances and more abstract bearers of musical identity, which we might describe as songs, pieces, or “works.” These relations are often further mediated by a material object or “text,” such as a score, lead sheet, or compact disc. My paper considers how analysis focused on specific performances in popular styles might broaden our understanding of the diverse work/text/performance relationships that the world of music offers to us. Drawing upon original field research, I compare two performances by Berlin-based recording artist Apparat. Both are “laptop sets,” an increasingly common approach in which electronic dance musicians transform and reconfigure their own precomposed sounds in real time using computers, specialized sequencing software, and an eclectic mix of hardware devices. Taking the laptop set as an exemplary instance of modern, mass-mediated performance, my paper asks the following questions: How is a music analyst to approach this kind of performance? “What” is being performed here? What is the boundary between performance and composition in this context? Which of the musician’s actions are “structural,” and which are “interpretive” or “expressive”? What can we learn about “performance” in general from studying this kind of event?

## MULTIMODAL METATHEORY AND THE STRUCTURE OF MUSIC VIDEO

Andrew Robbie

Harvard University

While much writing on meaning in classical music remains sidetracked by the red herring of ‘absolute’ music, the problem in popular music scholarship is that the rich tapestry of meanings that are attributed to music are exceeded by its sonic experience, and yet this excess is essential to music’s role as both text and/or performance, and social action. A further difficulty is the increasing multimodal complexity of texts that include popular music, resulting in a proliferation of intermodal meanings that exhaust the insights of many theories of semiosis. Ecosocial semiotics, represented in this paper largely by the theories of Paul Thibault, provides a multimodal semiotic theory that thoroughly grounds a functional semiotic (based in systemic functional linguistics) in the material structure of both the human body and its environment (using, in particular, J. J. Gibson’s ecological psychology). This paper will, by developing Thibault’s theoretical architecture, place materiality in the context of semogenesis (the coming into being of sign structures) in a way that speaks to questions of musical meaning in contemporary multimodal configurations.

To appreciate Thibault's position, we must quickly define two of the major concepts of systemic functional theory—system and metafunction. Systems represent paradigmatic organization as nested choices between types; meaning arises through the contrast of possible choices and through the collocation of multiple selections. Metafunctions are four highly general semiotic functions originally proposed for language that have since been applied to other modes. Each is said to be naturally associated with, or viewed through the lens of, a different type of structure.

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**Friday Morning, 16 November**

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**STRUCTURE AND SIGNIFICATION IN LATE TONALITY**  
**Kevin Korsyn, University of Michigan, Chair**

FROM "NIBELHEIM" TO HOLLYWOOD: THE  
ASSOCIATIVITY OF HARMONIC PROGRESSION

Matthew Bribitzer-Stull  
University of Minnesota

Conventional wisdom holds that the tonal-dramatic musical language of nineteenth-century Europe—particularly Wagner's—is alive and well in the modern-day film score. Oft-cited in support of this claim are the chromatic harmony and *Leitmotive* (associative themes) shared between the two genres. While this characterization ignores crucial differences between the art music of the romantic era and the film music of the silver screen, it points to a common musico-dramatic heritage that provides a natural avenue into the topic of associative harmonic progression.

As a point of departure, this study begins by introducing the under-explained concept of associativity. From there, it traces a remarkable commonality of sinister, eerie, and eldritch associations borne by a specific harmonic progression—the opening of Wagner's notorious "Tarnhelm" music in *Das Rheingold*—in works ranging from the early nineteenth century to the post-1975 orchestral film-music renaissance.

Methodologically, this study adopts a plurality of analytic approaches to explain the role of the "Tarnhelm" progression in a variety of musico-dramatic contexts. The progression's *Stufen*-centric, harmonic functions, its voice-leading transformations, its set-class constituency, and its various roles in establishing formal coherence reveal both functional/semiotic ambiguities and multiple connections that obtain between it and the textual, programmatic, visual, narrative, and dramatic contexts in which it appears.

## MUSICAL AND CULTURAL VALUES IN THE THEORY OF NARRATIVE ARCHETYPES

Michael Klein  
Temple University

In a recent article on narrative archetypes, Bryon Almén borrows James Litzka'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 Litzka's method of structuring myth while largely ignoring a greater concern to show how myths are involved with cultural values. This paper, therefore, seeks to critique and expand Almén's theory to demonstrate how a richer engagement with Litzka's work can help us understand how narratives confront both musical and cultural values. The paper is in three parts. Part one briefly summarizes Litzka's theory and Almén's borrowing of it for music analysis. Litzka 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 Litzka's work, which found little expression in Almén's method of narrative analysis. Following a tradition of narrative study, Litzka 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 process of transvaluing musical and cultural values.

## EQUAL DIVISIONS OF MUSICAL SPACE AND FORM IN THREE SONATA-FORM MOVEMENTS FROM THE NINETEENTH CENTURY

Howard Cinnamon  
Hofstra University

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 have limited influence in favor of expression. Recently some have shown 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 starts by examining the first movement of Liszt's *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 then applied to the first movements of Tchaikovsky's Symphony No. 4 and Brahms' Symphony No. 3.

## VISIONS OF HEAVEN AND HELL, CHROMATIC ASCENTS, AND THE DISPLACED *URSATZ*: THE FIRST MOVEMENT OF BRUCKNER'S NINTH

Boyd Pomeroy  
Georgia State University

Schenkerians have traditionally been wary of tackling the music of Bruckner, in large part owing to its harmonic unorthodoxy—and beginning with Schenker himself, famously dismissive of his former teacher’s skill (or lack thereof) in the art of *Auskomponieren*. With much recent Bruckner analysis characterized by Schenker-skepticism, one aim of this paper will be to demonstrate just how much light the Schenkerian approach can shed on the originality of Bruckner’s symphonic practice.

Although the central compositional idea of chromatic ascent towards an elusive, late-materializing, or otherwise problematized *Kopftön* is not unique to this movement (Edward Laufer has demonstrated similar processes at work in other movements by Bruckner), what is notable here is its overtly dramatic realization, tied in with a characteristically Brucknerian expressive dialectic of darkness and light. Sonata-formal issues raised include Bruckner’s highly individual adaptation of the three-key exposition, tonicization of the major dominant in a minor-mode context, and formal fusion of development and recapitulation. In voice-leading terms, this fused space belatedly supplies the structural upper-voice motion conspicuously missing from the exposition, but cast adrift, by an unbridgeable divide, from its grounding in the tonic.

Far from being anachronistic for Bruckner’s harmonic and formal practice, the Schenkerian approach brings into sharp focus a creative tension between sonata-formal process and tonal structure—or the familiar dichotomy of “outer” and “inner” form, the massive dislocation between the two employed in the service of a profoundly bleak expressive trajectory. At the same time, it also serves to illuminate the centrality to his “modernist” symphonic practice of a constructive engagement with Viennese Classicism.

**TIME-BEAT-FORM-POP**  
**Lori Burns, University of Ottawa, Chair**

BEND IT LIKE BUBBER: MILEY’S TIME IN “CREOLE LOVE CALL”

Fernando Benadon  
American University

By most accounts, jazz rhythm is elastic and adventurous. Attacks are displaced, phrases are laid back, time is stretched, subdivisions are blurred, and beats are turned around. Beyond the many anecdotal accounts, however, almost no studies have applied a music-theoretic perspective to unravel the properties of expressive timing found in jazz. This paper views expressive timing as a dynamic process of temporal transformation that can be quantified and formalized. Two types of transformation are examined within the context of a classic 1920s blues solo by trumpeter Bubber Miley. The *flux* (*F*) transformation converts an isochronous subdivision grid into one that accelerates and/or decelerates over time. The *swap* (*S*) transformation replaces the original subdivision grid with another that is proportionally related to it. The transformations, which often act together, always take place in the soloist’s part while the underlying tactus remains stable.

CONSTRUING RHYTHMIC SPACES IN DIASPORIC AFRICAN MUSIC

Chris Stover

## University of Washington

This paper examines excerpts of performances from several diasporic African musical communities, including folkloric and modern music from two Cuban rumba traditions, the traditional Shona music of Zimbabwe, Thomas Mapfumo's reinterpretation of that music in his seminal Chimurenga music from the 1970s, the *maracatú* of northeastern Brazil, and American jazz. The first part of the paper will examine the results of the superimposition of two rhythmic conceptions: what happens when, say, a duple and triple metric subdivision are felt simultaneously, and how a performer must come to terms with the metric instability that results. Most importantly, it will describe how a performer must actually be prepared to occupy not only these two metric spaces but also *the space in between and around them*. The second part will explore the more dicey issue that has been variously referred to as groove, swing, feel, pocket, *balanço*; that is, the elasticity with which a performer in these various styles treats the beat: stretching it, condensing it, playing ahead of or behind it: in other words, all of the issues involving these bodies of music that make transcription such a complicated and controversial endeavor. Ultimately it will propose a new definition of rhythmic space, one that regards beat as a measurable span of time rather than a single point around which other events are measured.

### BURNING BRIDGES: DEFINING THE INTERVERSE USING THE MUSIC OF U2

Chris Endrinal  
Florida State University

The word "bridge" suggests a connecting or transitional function. A physical bridge is an agent of transition, used to get from one side of a gap to another. When applied to the analysis of form in rock-pop music, however, the section traditionally labeled as the "bridge" does not necessarily connect two other sections. Often, there are no harmonic and/or melodic associations to surrounding material. Therefore, the label "bridge" does not adequately describe the function of the section.

Using melodic, harmonic, lyric, and reductive analyses of "bridge" sections in the music of Irish rock-pop group U2, this paper defines and illustrates the "interverse," a new term that replaces "bridge" in rock-pop songs. Specifically, four types of interverses are identified, each based on its relationship to preceding and succeeding material. A more specific definition of this section allows for detailed classification of structural and stylistic features a particular musician or group employs, thereby promoting a more thorough understanding of the formal processes and song construction and more detailed differentiation between artists and genres. In addition, this paper uses the methods mentioned above in conjunction with selected terminology from Moore (2001), Stephenson (2002), and Covach (2005) to define, illustrate, and distinguish the other sections of a rock-pop song, namely the introduction, verse, chorus, refrain, interlude, transition, conclusion, and coda.

### RE-CASTING METAL: POPULAR MUSIC ANALYSIS GOES MESHUGGAH

Jonathan R. Pieslak  
The City College-CUNY

This presentation examines the relationship between structural analysis and socio-cultural context surrounding the music of the Swedish metal band, Meshuggah. In 2003, I began ethnographic research on Meshuggah and the progressive/math metal subculture. Through fan interviews, concert



attendance, and internet research, I discovered that formal aspects of the music carry significant meaning for the fans of progressive/math metal, and in many cases, determine not only how fans relate to the music, but how they distinguish themselves from other metal subgenres. My analyses of Meshuggah's music reveal a rhythmic and metric structure based on large-scale odd time signatures, mixed meter, and metric superimposition. In recent albums, however, there is a distinct absence of surface-level meter through recurring units of pitch and rhythm, and models for rhythmic analysis developed by Krebs, Lerdahl and Jackendoff, Rothstein, and Yeston are valuable for pursuing an architectonic examination of hierarchical layers in the music. My presentation aims to situate these analyses within the larger context of metal and pop-rock scholarship. Based on a socio-cultural profile of this subgenre, I introduce the important relationship that exists between fans and structural analysis, and how this relationship may inform debates of methodology in pop-rock analysis.

## **POST-TONAL SONORITIES**

**Christopher Neidhöfer, McGill University, Chair**

### VOICE LEADING AS HARMONIC DETERMINANT IN ATONAL MUSIC

Andrew Pau

City University of New York, Graduate Center

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.

In exploring this thesis, the paper focuses on a specific class of voice leading, based on a chromatic wedge. The use of this voice leading in pieces by Schoenberg and Berg is explored, and voice-leading spaces are constructed to explore harmonies that can be connected using the same voice leading. I suggest that characteristic voice-leading gestures can act as structural elements that bind an atonal piece together. In such cases, it may be voice leading that determines harmony, and not the other way round.

### *LUDUS HINDEMITHENSIS: SERIAL RECKONINGS BEHIND NONO'S POLIFONICA-MONODIA-RITMICA (1951)*

Jeannie Ma. Guerrero

Eastman School of Music

History places Nono's second published work comfortably within the post-Weberian tradition for its Darmstadt-style serialism and for its brevity and sparseness. Nono's citing the influence of Brazilian rather than Weberian music has not dispelled this convenient association. It will therefore come as no *little* surprise that serial procedures in this work were shaped by the theory of a highly improbable figure, Paul Hindemith. Nono's failure to cite the precise influence of Hindemith's

*Unterweisung im Tonsatz* should not hinder efforts to explore the connection. At the time, citing Hindemith might have raised an undesirable, Neoclassicist banner, whereas Brazil (home of fellow Darmstadt-participant and Communist Eunice Katunda) better served his political purposes. Today, such recognition must negotiate new obstacles, namely, the theory's well-documented flaws. Yet Hindemith's melodic theory, as this paper will show, directly inspired Nono's serial innovations.

The motivations behind the sketches' numerous calculations cannot be revealed without acknowledging the role that Hindemith's theory plays in them. Further, scholars might not recognize the eclectic origins of Nono's serial development. Perhaps most importantly, the sketches vindicate the elder composer Hindemith against past historical judgments, showing his range of influence in the most surprising of places.

## POST-SERIAL ORGANIZATION IN LATE WORKS BY BOULEZ

Steve Voigt  
Brooklyn, New York

Perhaps more than any other composer, Pierre Boulez is indelibly associated with the development of European serialism in the 1950's. Through his influential writings and compositions, Boulez repudiated Schoenbergian serialism, and instead advocated an integrated approach in which all systems of organization would be governed by serial principles. However, it is generally accepted that after the 1950's, Boulez became dissatisfied with the strictures of serialism. In the works of the 1960's and early 70's, he began to loosen systematic control and to shape his materials in a more intuitive and informal fashion. But in the 1980's a new rigor in Boulez's compositional methods developed; a rigor that, so far, seems to have escaped scholarly attention. In this paper, I argue that in these works, Boulez replaced the intuitive and informal constraints used in the works of the 1960's and 70's with a repertoire of highly formalized techniques that are non-serial in nature, and that in doing so, he relegated the remaining serial techniques to a peripheral role. Furthermore, I posit that the purpose of these new techniques is to create a hierarchically organized language that, while non-tonal, is characterized by elements that may be viewed as abstract analogues for the building blocks of tonal organization.

## GÉRARD GRISEY AND THE NATURE OF HARMONY

Robert Hasegawa  
Harvard University

Gérard Grisey (1946-1998) was a founder of the influential "spectral" movement—in a reaction against the abstractions of serialism, spectral composers derived their musical material from the physics of sound and the mechanisms of our aural perception. This paper explores the tensions between Grisey's natural sonic models and their alterations and distortions in his music.

A common spectral technique is "instrumental synthesis"—the scoring of the partials of a complex natural sound for instrumental ensemble. Instrumental synthesis creates a musical effect which is neither "atonal" nor "tonal" in the traditional sense; rather, we can best understand this music as exhibiting an "extended tonality" based on the upper overtones of the harmonic series. The analysis of this extended tonality calls for new theoretical tools that can account for the complex harmonic relationships between high overtones.

I propose a modification of Hugo Riemann's theory of *Tonvorstellung* (tone representation): the idea that given a collection of pitches, we will understand them as connected by the simplest possible

just intervals. As a model of harmonic meaning based on our processes of auditory cognition, tone representation can illuminate the way we hear and understand harmony in a wide variety of works.

The theory is applied in an analysis of Grisey's *Vortex Temporum* (1994-96). Sketches for the piece indicate Grisey's use of distorted "stretched" and "compressed" spectra in addition to the familiar harmonic series. Applying my theory of tone representation makes possible a sensitive description of the aural effect of such distorted spectra. Frequently, we find that these sonorities are interpreted in ways that contradict their "natural" origins in Grisey's sketches. In conclusion, I discuss the tension between Grisey's natural models and their artificial distortions in his music; this tension is an essential factor in the aesthetics of spectral music.

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### Friday Afternoon, 16 November

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#### SMT SPECIAL SESSION SEXUAL HARASSMENT IN THE UNIVERSITY WORKPLACE

Committee on the Status of Women

Daniel Sonenberg, University of Southern Maine, Moderator

Brenda Ravenscroft, Queen's University, Kingston

Elizabeth West Marvin, Eastman School of Music

Sarah Warbelow, American Association of University Women

Michele McDonald, Maryland Office of the Attorney General

Sexual harassment, including harassment based on a person's sex, takes many different forms and affects a wide spectrum of people. In the university context, both students and instructors are subject to sexual harassment. Unwelcome behavior of a sexual nature impedes a student's ability to learn, study, work or participate in activities; harassment interferes with an instructor's work performance or creates a hostile or intimidating work environment. Recent research conducted by the American Association of University Women Educational Foundation confirms that sexual harassment is widespread on America's college campuses, and indicates that women are more likely to have their opportunities for educational and professional achievement undermined as a consequence of harassment.

This session will explore the problem of sexual harassment in the university workplace by focusing on how the issue affects the music theory community. The session is intended to raise awareness of the problem in the larger music theory community, as well as to offer support by providing members with strategies and resources for dealing with sexual harassment. Four panelists—each of whom will give a short talk and moderate a break-out discussion group—will present different, complementary perspectives on harassment ranging from the personal to the administrative and legal.

## TONAL ART AND CRAFT

*Charles J. Smith, University at Buffalo, Chair*

### THE DISCOVERY OF CIMAROSA'S NEAPOLITAN LESSON BOOK (1762: AGE 13)

Robert Gjerdingen  
Northwestern University

A manuscript once thought to contain the earliest works of Domenico Cimarosa (1749–1801) has now been shown to be Cimarosa's lesson book from his time as a young boy at one of the conservatories in Naples. The lessons, taken from the works of Francesco Durante (1684–1755), show Cimarosa learning not only important stock patterns like the Romanesca and the Folia, but also a special game of counterpoint. In many of these partimenti or instructional basses, a puzzling, incongruous shift from an interesting passage to a boring one makes one wonder what was intended. The presence of superfluous figures suggests that another, perhaps more interesting melody should be played above the "boring" passage. As it turns out, the intended combination involves playing the opening, "interesting" passage in the right hand above the "boring" passage in the left. It is "child's play," to be sure. But it is also a very sophisticated way of developing musical memory, a sense of figure and ground, and an intuitive grasp of counterpoint. The audience will be shown how the counterpoint game works and how it also applies to short canons, and will be invited to solve one of maestro Durante's many contrapuntal challenges.

### MODULATION TO THE MINOR DOMINANT IN MAJOR: THREE EXAMPLES BY BACH

Mark Anson-Cartwright  
Queens College-CUNY

In modulations to V, the mode of the local key is normally the same as that of the global tonality; in other words, the key of V is usually 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 II of IV or IV of II—yet can be heard in retrospect as minor V because of its proximity to the major V that follows. Although the character and rhetoric of the modulation to minor V is different in each piece, all three pieces share an interesting tonal strategy: the placement of minor V close to the conclusion, in near juxtaposition 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 is apparently motivated by the text of the chorale. Modulations of this type—seldom mentioned in harmony texts—can be just as effective or appropriate as the more familiar or "normal" procedures and therefore deserve closer attention than theorists have given them.

## MOZART'S ART OF RETRANSITION

Roman Ivanovitch  
Indiana University

Scholarly attention has been gradually attuned in recent years to the notion of the “beautiful” in Mozart: studies by Scott Burnham, Mary Hunter, and Maynard Solomon have all drawn attention to passages of exquisite, sumptuous beauty, whose extravagance seems quite self-conscious, a hallmark of the composer’s style. The present study amplifies this concern by focusing on a characteristic Mozartian gesture, noteworthy for being at once prosaically functional yet conspicuously, richly (over)composed: a type of retransition procedure, involving a contrapuntally braided linear descent over a dominant pedal. While sometimes found in quicker movements, the most distinctive setting for this gesture, one of a family of “standing on the dominant” techniques, is in slow movements, whose pacing allows the gesture’s tiny harmonic and contrapuntal jolts to resonate and be fully absorbed. In the context of Mozart scholarship, these underexplored spots are particularly sensitive, for they lie at the seam between art and craft: some of the most dazzling, memorable passages in Mozart, they are nonetheless grounded in everyday compositional procedures, markers of quotidian expertise. Using examples from the Piano Concertos in C, K.503 and K.451, the Piano Trio in B flat, K.502, and other works, I elucidate the basic technical features of these spots. The aim is to place any more effusive discussions of Mozart’s artistry on the firmest possible footing.

## CHOPIN'S E-MINOR PRELUDE AND BACH'S "CRUCIFIXUS"

Nicole Biamonte  
University of Iowa

The influence of J. S. Bach’s music on Chopin’s compositional oeuvre and Chopin’s occasional use of Bach’s keyboard works as models is well established, and many commentators have compared Chopin’s twenty-four Op. 28 Preludes to those in the two books of Bach’s *Well-Tempered Clavier*. It is a choral work, however, that seems to have been the model for Chopin’s Prelude in E Minor, Op. 28 No. 4: the “Crucifixus” from Bach’s Mass in B Minor. While the formal structures of the two works are different—Bach’s “Crucifixus” is a passacaglia built on a chromatic descending tetrachord, while Chopin’s Prelude is a binary interruption form—they share a number of salient characteristics: the conventionally tragic key of E minor, elegiac affects enhanced by slow tempi, a repeated lament bass, chromatic descending voice-leading creating a series of dissonances linking the parallel first-inversion triads that connect the structural tonic and dominant chords, a *Kopfton* of scale-degree 5 elaborated with a prominent upper-neighbor motive on multiple structural levels, and the use of a surprising inverted German-sixth chord to prepare the final cadence. This study examines the close musical relationship between Chopin’s Prelude and Bach’s “Crucifixus” and surveys the documentary evidence for Chopin’s familiarity with Bach’s Mass in B Minor.

## BARTÓK'S ARPEGGIOS

David Clampitt, Yale University, Chair

### SERIAL STRUCTURE, TRANSFORMATION, AND THE MANUSCRIPT REVISIONS OF BARTÓK'S "DIVIDED ARPEGGIOS"

Edward Gollin  
Williams College

The paper considers an unusual serial design and its relation to Bartók's manuscript revisions in "Divided Arpeggios," no. 143 from *Mikrokosmos* vol. 6. The serial design involves Bartók's use of two distinct maximally-distributed multi-aggregate cycles—compound interval cycles that order multi-aggregate sets with nearly even pc distributions—to control harmonic, contrapuntal and formal structure in the work. In particular, the paper explores how Bartók's transposition of a seven-measure passage in his working copy of the final draft—turning what was, in the earlier drafts, a harmonically closed B section into a harmonically open section—interacts with the work's cyclical/serial design, engendering transformational isomorphisms with certain local and large-scale contrapuntal and harmonic structures in the work. The paper also examines how certain of Bartók's smaller revisions to the first draft clarify the work's large-scale tonal plan.

### AFFINITY SPACES: MEDIEVAL CONCEPTIONS IN THE ANALYSIS OF TWENTIETH- CENTURY MUSIC

José Oliveira Martins  
University of Iowa

The paper explores the organization of pitch space according to the medieval notion of intervallic affinities and proposes its relevance to the analysis of twentieth-century music. It proposes that the notions of *transpositio* and *transformatio* applied to the medieval scale-system using the framework of affinities (*affinitas*) can be generalized into a set of operations that construct and act on pitch-class space, giving rise to multiple configurations I call affinity spaces. This set of operations both defines the geography and measures the harmonic distance in each of the spaces, and sets up appropriate frameworks for the analysis of twentieth-century modality. The paper comprises three sections. The first section examines the pitch relations of *transpositio* and *transformatio* involved in the concept of medieval affinities. The second section proposes the generalized construct of affinity spaces, and examines some of its algebraic and geometrical properties. The third section probes the analytical applicability of some of these spaces in works by Bartók and Lutosławski.

## CHROMATIC COLLISIONS

Timothy Jackson, University of North Texas, Chair

### OF THWARTED AND CLASHING LEADING TONES: GESUALDO'S CHROMATICISM REVISITED

John Turci-Escobar  
Washington University in St. Louis

My paper proposes a conceptual framework for interpreting an idiosyncratic form of chromaticism in the late madrigal collections of Carlo Gesualdo. I distinguish three closely related techniques: chromatically thwarted leading tones, chromatic reversals, and chromatic hyper-reversals. These uses differ from normative sixteenth-century chromaticism in the placement and treatment of leading tones. My interpretation of these uses hinges on a broad definition of leading tones in sixteenth-century counterpoint. Since their publication, Gesualdo's chromatic madrigals have attracted a broad and distinguished gallery of musicians, critics, and scholars, from Anastasius Kircher to Richard Cohn. This paper engages three strands of thought within this critical tradition. Most directly, it responds to the interpretive framework proposed in Carl Dahlhaus' landmark article, 'Zur chromatischen Technik Carlo Gesualdos.' In a more general sense, this paper responds to those approaches that have relied, often tacitly, on triadic concepts as the basis for the explaining and categorizing Gesualdo's chromatic progressions. Finally, this paper confronts a long tradition of writers, beginning with Charles Burney, who have ascribed Gesualdo's distinctive chromatic writing to a lack of compositional control. The latest and most forceful exponent of this tradition is James Haar.

### MAXIMALLY ROUGH, AND LOVING IT: APPRECIATING EXPRESSIVE HYPERDISSONANCE IN THE EARLY 20TH CENTURY

Blair Johnston  
University of Michigan

In many highly chromatic tertian works ca. 1905-1935, common practice tonal syntax and other, radically different kinds of melodic and harmonic organization coexist. Integration and interpenetration of these manifold *modi operandi* can be highly complex, as scholarly work on the music of Debussy, Skryabin, Schoenberg, and other composers has shown. Often, different activities occur in quasi-distinct yet tangled layers of music. While the analysis of individual layers may be straightforward, analysis of relationships between layers has proved far more challenging. However, research on contradictory criteria, multiple surfaces, and the perception of paradox in music suggests that an appreciation of such relationships may contribute greatly to our understanding and enjoyment of this repertory.

In this paper, I examine some particularly striking passages by Richard Strauss, Serge Prokofiev, and Sergei Rachmaninoff, and show how expressive hotspots are created by friction between different, competing activities. I propose the term "hyperdissonance" for such events. As formulated here, hyperdissonance involves paradox: something that is stable according to one activity is unstable according to another. At these special moments, collisions of different value systems are exploited, resulting in local pressure points, dramatic climaxes, and, sometimes, wonderful harmonic grotesquery.

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## Friday Evening, 16 November

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### SMT SPECIAL SESSION PRESENTING AT A CONFERENCE

Committee on Professional Development  
Maureen A. Carr, Pennsylvania State University, Moderator

Taylor Greer, Pennsylvania State University  
Ellie Hisama, Columbia University  
Julian Hook, Indiana University  
Janet Schmalfeldt, Tufts University  
Joseph Straus, City University of New York, Graduate Center

For this special session the Committee on Professional Development (Maureen A. Carr, chair) has invited a panel of five distinguished music theorists, most of whom have been intimately involved in the selection process for national conferences. All have successfully presented at national conferences. Each member of the panel will focus upon a particular theme related to the topic of “Presenting at a Conference.” Most have experiences that cross these narrow boundaries. They therefore will not limit themselves strictly to their assigned topic, but will speak broadly to the issue of “Presenting at a Conference” while covering their focus area in more depth. A brief description of each panelist’s primary topic is provided below, listed in the order of presentation:

1. Taylor Greer: The Program Selection Process
2. Joseph Straus: Writing a Successful Proposal
3. Ellie Hisama: Organizing a Special Session
4. Julian Hook: Communicating Technical Material Clearly
5. Janet Schmalfeldt: Tips for a Successful Presentation

The proposed format for the session is to invite each panelist to address issues embodied in their respective topic. Each panelist has been asked to prepare a 10-15 minute presentation. The panelists will proceed without interruption or questions from the audience until all five have concluded their presentations. Following the presentations, there will be an opportunity for questions to the panel from the audience and open discussion of issues related to “Presenting at a Conference.”

### SMT SPECIAL SESSION DETERRITORIALIZING MUSIC THEORY; DELEUZE, GUATTARI, AND A THOUSAND PLATEAUS

Music Philosophy Interest Group  
Alan Street, University at Buffalo, Chair

The Music Philosophy Interest Group of the Society for Music Theory announces a special session around the ideas of Gilles Deleuze and Felix Guattari in their 1987 philosophical treatise, *A Thousand Plateaus: Capitalism and Schizophrenia*. This monumental treatise touches not only on the subject of music—a most important aspect of the work—but also on a host of other topics ranging from culture, gender, politics, and religion, to give only a small sample. For the music theorist and analyst specifically, the text poses definitive challenges by calling into question notions such as “hierarchy,”



“structure” and the “arborescent,” and then suggests “deterritorialization,” “multiplicity of multiplicities” and the “rhizomatous” as new modes of thinking. This means that different avenues of music analysis are possible only through an abnegation of the systematic and hierarchic, with a re-focusing on other aspects embracing a deterritorialized standpoint. *A Thousand Plateaus* is, however, much more than an intellectual/political stance against structuralism: in fact, structuralism is an important concern, and is not to be precluded as entirely inconsequential. The session consists of five presentations, each of which deals with some aspect of Deleuze and Guattari’s work, and aims to explain the potential musical ramifications of their thought upon music theory and analysis through an examination of 20<sup>th</sup>-century and contemporary music/media.

*MILLE PLATEAUX, YOU TARZAN: A MUSICOLOGY OF  
(AN ANTHROPOLOGY OF (AN ANTHROPOLOGY OF A THOUSAND PLATEAUS))*

John Rahn  
University of Washington

First we critique the philosophy and practice of and around the book *A Thousand Plateaus* (TP) by Gilles Deleuze and Felix Guattari. We show how its program of dissed organization, nonhierarchy, transformation, and escape from boundaries at every moment resonates in harmony with some of its modes of presentation and mentation, but dissonates with others. The Anthropological Gaze which forms in the name of observation, and re-forms Us as it forms Them, is one of the nodes of TP’s thought: the erotic, climax-free plateaus of some Batesonesque Balinese orgy. Even the structuralism of Claude Levi-Strauss permeates TP in the form of a paradigmatic procedure of polar opposites (e.g. raw vs. cooked in Levi-Strauss, territorialization vs deterritorialization etc. in TP). Is such a Gaze performed by TP on us, or merely referred to by it? What is the nature of TP’s practice upon us?

Taking off from a series of articles by John Rahn and others, we will then further explore the nature of this Platonically anti-Platonic practice by TP upon us as it affects the practice of music and thinking about music.

*IMMANENCE, TRANSCENDENCE, AND THE MUSICAL  
WORK IN A THOUSAND PLATEAUS*

Michael Gallope  
New York University

In order to study music at all, it may be argued that we require an “idea” of a piece of music to being thinking about it; but this is also the most basic definition of musical transcendence. This paper attempts to read the work of French philosopher Gilles Deleuze in order to ask: is it ever possible to think about music outside of transcendence? For a historian of philosophy, Deleuze follows in the tradition of Spinoza, Nietzsche, and Bergson, in that his philosophy explicitly rejects the mediation of differences by sovereign, transcendent totalities. Being is, for Deleuze, the sheer process of living, pure innovation, the clamoring force of change, an unmediated production of difference. But I think this ontology of immanence produces a paradox for Deleuze and Guattari’s account of music in *A Thousand Plateaus*. On the one hand, Deleuze’s ontology of immanence is oriented towards flux, process, and becoming. On the other hand, Deleuze and Guattari’s critical practice repeatedly suggests that actual musical works exhibit fixed properties of expression, implying transcendence. I will relate their ideas to two related musical examples, one the transcription of the other: Lou Reed’s “This Magic Moment”

(1996) and Olga Neuwirth's (2002) transcription of the song in her operatic adaptation of the film *Lost Highway*.

## “DETERRITORIALIZING THE REFRAIN”: MUSIC AS PHILOSOPHICAL CRITIQUE

Martin Scherzinger  
Eastman School of Music

This paper describes the critical role played by music in a European philosophical tradition ranging from Schopenhauer and Nietzsche to Adorno and Deleuze. Music is a common thread in these philosophical accounts, demonstrating a unique ability to resist epistemological certainties, to test the limits of knowledge and meaning, and thus to function as a kind of philosophical discourse of the unsayable *par excellence*. The paper then explores musical works that attempt to dramatize in sound the distinctively critical aspect of music's traditional philosophical import. Using Deleuze and Guattari's *A Thousand Plateaus* as a central reference point, the paper analyzes three late modern musical examples from Europe – Helmut Lachenmann's *ein kinderspiel* (1980) for piano, György Ligeti's *Étude Désordre* (1985), for piano, and Louis Andriessen's *Ende* (1981), for 2 alto recorders (1 player). The paper shows how these works aspire, in Deleuze and Guattari's terms, to “*deterritorialize*” their refrains and thereby offer up modes of listening that unsettle their musical/conceptual points of stability. The music's critical philosophical component lies in its ability to become something to which it has immediately apparent relation, and which no theory will have been prepared to conform or translate in advance.

## VOICE, AURALITY, ONTOLOGY: LOCATING THE SONIC IN *A THOUSAND PLATEAUS*

Amy Cimini  
New York University

This paper proposes that Gilles Deleuze is an *aural* thinker. What does this mean? Deleuze uses the *voice* to forward his most basic ontological proposition, which is: Being is univocal, and all beings are inhabited by its creative power. Being is, for Deleuze, “a single voice for every hum of voices.” This paper links the Deleuzian voice not with philosophical treatment of music as such, but with philosophical treatment of the voice, working through Derrida, Heidegger, Barthes and Jean-Luc Nancy. Unlike many of these thinkers, however, Deleuze and Guattari do initiate a serious engagement with music in *A Thousand Plateaus: Capitalism and Schizophrenia*. This paper puts pressure on the tensions between the “single voice” of Deleuzian ontology and the vocal music that they analyze—and valorize. Deleuze and Guattari's readings of the musical voice elaborate their claim that the voice has a special power to “*deterritorialize*,” or, flee systematicity of any kind—linking the voice with freedom in a way that has strong Barthesian overtones. While assessing this explicit privileging of the voice, this paper explores the possibility of mobilizing *both* Deleuzian voices in the analysis of contemporary vocal music. Brian Ferneyhough's *Time and Motion Study III* (1974) for 16 solo voices, electronics and untuned percussion raises important tensions with respect to these two Deleuzian voices, requiring that we read them with respect to music's relation to capital, a line of inquiry that is suspiciously absent from Deleuze and Guattari's musical thinking in *A Thousand Plateaus*.

## ON THE 1001<sup>ST</sup> PLATEAU

Benjamin Boretz  
Bard College

Passages sliced out of *A Thousand Plateaus* juxtapose to suggest a musical aesthetic—not an aesthetic necessarily of music *per se*, but an aesthetic quintessentially musical: specific but (verbally) inexplicit, experiential but impalpable. The text itself, in the course of its analysis of behavioral and mental structures, intensely preoccupies itself with the aesthetics of normalcy, or, the normalcy of aesthetics, or, even, the sense of therapy (its nominally explicit subject) as the work, constant and unremitting throughout everyone’s life, of putting oneself and one’s world together via a nexus of world-processing expressivities, mundane and elevated inseparably. Listening, as they suggest, along the paths of the “secret link constituted for the critique of negativity, the exteriority of forces and relations, the denunciation of power...”, proposes a discourse which exerts (and cultivates) vision exclusively to look, hearing exclusively to listen. Does the spectre of an issue appear at the convergence point of the sounds, words, images, silences, blacknesses which populate this discourse? Or is it only a polyphony of times, merging, or not, to ontologize a fused or dispersed experiential residue? But it was the suspicion of a lurking issue within the text of *A Thousand Plateaus* which mobilized the setting together of computer-processed piano sounds, interactive playing, singing and speaking sounds, video photographs of domestic objects, bookpages of artworks, and vocalized fragments of the book itself—a discourse groping to identify, make palpable, form in its cumulation, an otherwise unaskable question, an otherwise ungraspable thought.

### SMT SPECIAL SESSION AN INTRODUCTION TO GEOMETRICAL MUSIC THEORY Dmitri Tymoczko, Princeton University, Moderator

Geometrical models have become increasingly important in recent music theory, and have been explored by prominent theorists such as John Roeder, Richard Cohn, Jack Douthett, Peter Steinbach, Joseph Straus, and others. The aim of this session is to describe recent work, much of it collaborative, that clarifies the significance and meaning of these models. We argue that traditional set theory has a rich geometrical content, and that by understanding this content, theorists can attain new insights into a range of traditional questions.

The introductory paper generalizes traditional set theory by subsuming transposition and inversion in a larger family of “OPTIC operations.” The second paper shows how to construct geometrical spaces corresponding to any of the sixteen combinations of the OPTI operations (but not C). These are “orbifolds,” sophisticated spaces of a sort that mathematicians have only begun to explore in the last 50 years. The third paper asks “how does one measure distance in these spaces?” Since line segments correspond to voice leadings, this question is equivalent to the question “how does one measure the size of a voice leading?” The session concludes with a paper comparing voice-leading spaces to another, seemingly very different, musical geometry: Quinn’s Fourier-based model, which represents chords in terms of their resemblance to prototypical, “maximally even” set classes.

## GENERALIZED SET THEORY

Dmitri Tymoczko, Princeton University  
Clifton Callender, Florida State University  
Ian Quinn, Yale University

This paper proposes a twofold generalization of traditional set theory. First, it subsumes transposition and inversion within a larger family of “OPTIC symmetries”: octave shifts (O), permutations (P), transpositions (T), inversions (I), and cardinality changes (C). Second, these operations are applied to *progressions* rather than solitary musical objects. To do this, one must distinguish *global* applications of the OPTIC symmetries, in which the same operation applies to each chord in a progression, from *local* applications, in which different operations can apply to the individual chords in a progression.

This “generalized set theory” brings three benefits. First, it clarifies the relations between a large number of music-theoretical concepts, including “chord progression,” “voice leading,” “pitch class interval,” and “dualistic transformation.” Second, it suggests new symmetries to explore: in particular, *local transpositional (or TI) voice-leading classes*, useful for analyzing chromatic tonal music. Third, it lays the foundation for the geometrical reinterpretation of set theory. One can construct geometrical spaces representing every combination of O, P, T, and I: ordered pairs of points in these spaces represent local symmetries; line segments represent global applications of OPI and local applications of T. Understanding these geometrical spaces requires the generalized set theory proposed here.

## GEOMETRICAL CHORD SPACES

Clifton Callender, Florida State University  
Ian Quinn, Yale University  
Dmitri Tymoczko, Princeton University

We can cast much of the generalized set theory discussed in the first paper of our session in terms of a continuous, geometrical approach that contrasts with the discrete, combinatorial approach of much contemporary music theory. The second paper will focus on the geometrical spaces that arise from the sixteen combinations of octave (O), permutational (P), transpositional (T), and inversional (I) equivalence. This approach implicitly underlies recent geometrical models of voice-leading by Roeder, Cohn, Douthett, Straus (as well as most of neo-Riemannian theory) and thus unifies these different approaches. Additionally, these geometric spaces permit “fuzzy” measures of similarity between chords that are contrapuntal, rather than harmonic, in conception (see Paper 3) and facilitate a deeper understanding of the relationship between voice leading and harmony (see Paper 4).

## MEASURING VOICE LEADINGS

Rachel W. Hall, Saint Joseph’s University  
Dmitri Tymoczko, Princeton University

This paper considers two related problems: how to compare voice leadings between multisets of pitch classes and how to compare the analogues of voice leadings (local voice-leading classes) between set classes. Voice leadings and their analogues are represented geometrically by line segments;

therefore, the problem of measuring voice leading is equivalent to the problem of measuring length in the geometrical spaces discussed in Paper 2.

Although we may have a clear intuition that a certain voice leading is smaller than another, our intuitions do not tell us how to actually “measure” a voice leading. Tymoczko (2006) proposed that any measure should be consistent with two basic observations: voice leadings in which voices move by short distances are considered more efficient, and voices typically move along non-intersecting paths. He then developed a specific mathematical requirement—the “distribution constraint”—that every method of comparing voice leadings respecting these two principles should satisfy. However, he did not provide an algorithm for comparing any two given voice leadings absent a particular choice of metric.

We show that the distribution constraint is equivalent to the so-called submajorization partial order, a mathematical structure developed in the study of welfare economics. Submajorization allows us to compare voice leadings without arbitrarily choosing a metric. We use an extension of submajorization to measure distances between set classes in OPT space, and we suggest that these distances relate to our intuitions about similarity of set classes.

## FOURIER SPACE AND VOICE-LEADING SPACE

Ian Quinn  
Yale University

This paper considers connections between the geometric models of voice leading that are the subject of the session as a whole and my geometric model of harmonic similarity, or “chord quality.” Maximally even sets inhabit geometrically important points of both kinds of space, points that are typically “remote” and “unique” in easily definable ways. Indeed, maximally even sets play an important role in understanding what the structure of each space means with respect to familiar notions of chord similarity. This paper will investigate the origins of this structural point of contact and its implications for theorizing about chord quality in terms of the various geometric models. Joseph Straus’s notion of “rogue” chords will be explained in these contexts.

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**Saturday Morning, 17 November**

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SMT SPECIAL SESSION  
ETHNIC DIVERSITY IN MUSIC THEORY: VOICES FROM THE FIELD

Diversity Committee  
Jeannie Ma. Guerrero, Eastman School of Music, Moderator

YouYoung Kang, Scripps College  
Sumanth Gopinath, University of Minnesota  
Jairo Moreno, New York University  
Horace Maxile, University of North Carolina-Asheville

The problem of ethnic diversity in the academy of the present is one that exhibits a bifurcated trend. On the one hand, university administrations are greatly encouraging their departments and programs to think broadly and interdisciplinarily, in ways that would appeal to constituencies with diverse ethnic backgrounds. Academic recruitment offices are also engaged, to varying degrees, in fierce competition over middle- and upper-class minority students in an effort to diversify the appearance of

their populations. On the other hand, the rising cost of tuition and fees at universities all over the country are hindering working- and, increasingly, middle-class students from attending college at all or are forcing these students to incur extensive debts that, in the present economy, are becoming unmanageable. This latter trend is negatively affecting racial and ethnic diversity in universities, particularly regarding members of underrepresented and underprivileged minorities.

The Society for Music Theory faces substantial challenges on both fronts. Regarding the first challenge, the Society is at a crossroads of sorts—and has been for several years—in which the conceptual and scholarly broadening of the field has begun to attract an increasingly diverse cohort of future scholars. And yet, this very broadening of the field has led it, and these scholars, to imagine themselves increasingly as scholars within “music studies” (Krimms) who participate in historical-musicological, ethnomusicological, and music-theoretical conversations within their work. American music theory's identity crisis has unsurprisingly elicited a retrenchment of sorts, and the resulting détente—which has lasted for over a decade—has facilitated the de facto marginalization of non-traditional subject matter, which is relegated to evening sessions, the “back pages” of journals, or venues for publication not typically associated with music theory.

The second challenge is of even greater import, given that the present condition in the US of increasing economic scarcity and elite wealth concentration is precipitously returning the academy to its pre-WWII role as a site for cultivating upper-class privilege. Even if the SMT is able to overcome its short-term diversity problems, what are the long-term prospects for the ethnic diversity of American music theory in an academy increasingly inaccessible to the vast majority of the populace?

The idea of margins and reading them could apply to identifying potential scholars from underrepresented groups. While some contend that “You got tuh go there tuh know there” (Zora Neal Hurston), we do not necessarily have to entrust non-traditional material to insiders alone. What constitutes “the academy” today might need redefinition. Numbers may be increasing at community colleges, smaller state colleges, historically Black Colleges, and other minority-serving institutions. Thus the question of ethnic diversity in American music theory may have to be expanded to consider institutions where most SMT members do not teach—and the ramifications of that additional layer of marginalization to the Society.

The Diversity Committee's panel will present four scholars within the field who identify as “visible minorities” and seek to foster a discussion on the wider problems of diversity within the Society of Music Theory. The panelists' presentations will include biographical discussions of navigating through the academy as minorities, experiences with university-administrative policies on ethnic diversity, and proposals for improving diversity within the field (including ideas such as the hiring of a full-time staff position devoted to recruiting minority scholars).

## **METER**

**Scott Murphy, University of Kansas, Chair**

### JUGGLING TWOS AND THREES

Zachary Cairns  
Eastman School of Music

In his study of Robert Schumann's music, Harald Krebs (1999) defines two useful types of metrical dissonances: grouping dissonances and displacement dissonances. However, there is an additional kind of metrical dissonance, possible in asymmetrical meters (5/4, 7/8, and the like), which does not fit squarely within the bounds of either category. What I call a shared-cardinality grouping dissonance (SCGD) is the subject of the present paper.

This paper is in three parts. First, I begin with a general discussion of asymmetrical meters, focusing on metrical well-formedness as understood by Fred Lerdahl and Ray Jackendoff (1983), Justin London (2004), and David Temperley (2001). Second, I define the concept of an SCGD and discuss its general characteristics. In this section, which serves to distinguish the differences between an SCGD and Krebs' previously defined dissonance categories, I provide examples of SCGDs through a metrical analysis of Tchaikovsky's Sixth Symphony (mvt. 2). Finally, I conclude the paper by suggesting some further applications of the SCGD concept.

## HYPERMETRICAL TRANSITIONS

David Temperley  
Eastman School of Music

Since hypermeter in common-practice music is generally duple, shifts in hypermeter usually involve a shift from "odd-strong" (a pattern in which odd-numbered measures are strong) to "even-strong," or vice versa. We can further classify hypermetrical shifts as "sudden" or "gradual," depending on the manner in which the shift occurs. In this paper I focus on gradual hypermetrical shifts, in which the musical cues to hypermeter (such as harmony, phrase structure, and parallelism) reflect a nuanced, incremental realignment from one "duple phase" to the other; I call such shifts "hypermetrical transitions." I will examine five examples of hypermetrical transitions in pieces by Mozart, Beethoven, Schubert, Chopin, and Mendelssohn, focusing in each case on the way the shift is realized—the musical cues that convey it—and its function with regard to the piece as a whole.

## METRIC SYMMETRIES, STATES, AND SPACES: HUMPERDINCK AND WAGNER

Daphne Leong  
University of Colorado-Boulder

Building upon recent geometric models of metric states by Richard Cohn and Scott Murphy, this paper proposes a complementary model and applies it to Engelbert Humperdinck's *Hänsel und Gretel* and Richard Wagner's *Parsifal*. The model defines a new set of relations between metric states comprising a subgroup of the group of symmetries of a square, and, for greater power, applies these relations to more broadly defined metric states than those of Cohn and Murphy, within a more generalized metric space. Examination of *Hänsel und Gretel* and *Parsifal* reveals metric-dramatic strategies common to the two operas: specific symmetric relations portray particular dramatic ones in the two works. Additional examples demonstrate the model's broader scope.

## PERCEIVING AND DISTINGUISHING SIMPLE TIMESPAN RATIOS WITHOUT METRIC REINFORCEMENT

Benjamin Carson  
University of California-Santa Cruz

The experience of rhythmic regularity can be attributed generally to two main factors: *metric hierarchy* (small periodic patterns contained within individual elements of larger ones) and *proportional simplicity* (small-number ratios among adjacent timespan pairs). Metric hierarchy has been associated with the production of expectancy-related percepts like metrical accent (Lerdahl and Jackendoff 1983) and projection (Hasty 1997). Proportional simplicity in event-streams is a known factor in the generation of expectancy (Desain 1992), but is rarely examined outside the context of meter.

To study proportional simplicity in isolation, we composed flexible compound melodies, whose “surface” timespans were never simple or periodic, and whose events could be segregated, by loudness or pitch, into stream-pairs. In some stream pairs, the timespan proportions of one stream—a “target rhythm”—were exclusively simple, but aperiodic. We hypothesized that incremental treatments of the streaming distances (in pitch or loudness) would influence the salience of simple target rhythms. Under a variety of conditions, the relative streaming distance of the target rhythm significantly correlated with listeners’ reported confidence in their perception of a regular pulse. Listeners’ appreciation of proportional simplicity in this strictly ametric context suggests the need for retrospective—rather than projection- or expectancy-based—theories of musical time.

### ENGAGING EARLY MUSIC

**Peter Schubert, McGill University, Chair**

### MELODIC-FUNCTIONAL ANALYSIS OF GREGORIAN CHANT

Richard Porterfield  
City University of New York, Graduate Center and Mannes College

This paper introduces a theory of melodic function that refines and enlarges upon a recent proposal by Fiona McAlpine for the structural analysis of Gregorian melody. The task is to bridge the gaps in McAlpine’s hypothesis, not only at the note-to-note level, but also between acknowledged historical models of plainsong modality and Schenkerian principles assumed tacitly. Melodic-function theory proposes stronger bonds among the tones of chant than McAlpine suggests, through synthesis of Schenkerian concepts and the strand of modal theorizing David Cohen calls the ‘*cantus* tradition,’ wherein modes are exemplified by melodic formulas that highlight the functions of modal degrees, the most fundamental being those of the final and the reciting-pitch or tenor.

Five distinct melodic functions are identified in Psalm-tone 1 and the Mode-1 antiphon *Inclinavit Dominus*. Graphic analysis traces the establishment, operation, and transfer of functions among modal degrees in a fundamental structure of two functional voices, tenor and final. The linear descent of tenor function unfolds in melodic tones the abstract harmonic background: an intervallic-vocalic dyad of modal final and modal tenor. *Cantus*-tradition sources summarize the mode with precisely this abstract dyad.



## “MESSY STRUCTURE”? MULTIPLE TONAL CENTERS IN THE MUSIC OF MACHAUT

Jennifer Bain  
Dalhousie University

Challenging the organicist paradigm, which suggests that in order for works to have structural coherence they must have a single tonal center that controls pitch hierarchy, this paper proposes that the songs of Machaut frequently introduce multiple tonal centers. Stressing the importance of initial sonorities as well as points of cadence, I suggest that individual songs do not always fall into single, discrete categories according to their structural organization, but rather belong to one or more tendency groups. An examination of several of these groups demonstrates the many ways in which tonal structure is organized within songs, between songs, and among groups of songs.

## REHEARING MACHAUT’S MOTETS: TAKING THE NEXT STEP IN UNDERSTANDING SONORITY

Jared C. Hartt  
Oberlin College

Sarah Fuller has established a useful set of terms for discourse about sonority in Guillaume de Machaut’s motets. She outlines three categories of sonorities (perfect, imperfect, and doubly imperfect), each with varying degrees of stability. I propose refinements to her classification scheme that continue to be rooted in fourteenth-century thought, yet also respond to a twenty-first-century aural perspective. By cataloguing all sonorities in Machaut’s nineteen three-voice motets, I describe how my corresponding perfect, mixed, and imperfect categories can be divided into subcategories. I elucidate how these divisions not only find support in extant *contrapunctus* manuals, but also allow for a more specific rendering of a sonority’s aural effect. Further, I discuss how certain sonority types may assume various functions during the course of a motet. For example, Machaut reserves the roles of beginning, penultimate, and ending for sonorities with specific intervallic compositions.

In an analysis of Motet 4, *De Bon Espoir, de Tres Doulz Souvenir / Puis que la douce rousée / Speravi*, I discuss the work’s major points of tonal articulation and propose that the motet features two primary tonal centers. I show how the distinctions I have made between various sonority types become useful in describing how Machaut gradually switches focus between the two tonal centers.

## THE RHYTHMICS OF FRANCISCO DE SALINAS: A TRUE REBIRTH OF GREEK MUSICAL THOUGHT

Matthew Royal  
Brock University

Francisco de Salinas’s panoptic theoretical treatise, *De Musica Libri Septem* (1577), was highly regarded in its day and esteemed by theorists of the Baroque. However, the scholarly attention that it has received in modern times, at least in the English-speaking world, has been piecemeal. This paper

focuses on the often neglected last three books of *De Musica*, which treat rhythmic. Salinas's writings on rhythm deserve renewed interest for three reasons:

- (1) Books 5-7 of *De Musica* represent the single most expansive treatment of the relationship between poetical and musical rhythm in any musical treatise of the 15<sup>th</sup> or 16<sup>th</sup> centuries.
- (2) Salinas is the first theorist since Antiquity to reintegrate the three elements that were basic to Greek music theory, namely melody, poetry and dance.
- (3) Salinas provides a systematic ordering of poetic feet based on three parameters: (a) number of notes, (b) number of beats, and (c) placement of longs and shorts. Although this organization was intended to help the sixteenth-century composer, it also provides a new perspective for the modern theorist.

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**Saturday Afternoon, 17 November**

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SMT PLENARY SESSION  
ISSUES IN MUSIC COGNITION

Elizabeth West Marvin, Eastman School of Music, Organizer and Chair

MUSIC COGNITION: INFLUENCES OF MUSIC THEORY ON A DEVELOPING DISCIPLINE

Carol Krumhansl  
Cornell University

COLLABORATIONS IN PURSUIT OF TONAL TENSION

Fred Lerdahl  
Columbia University

MUSICAL ORIGINS: EARLY COMPETENCIES, ACQUISITION, AND EFFECTS OF MUSICAL  
EXPERIENCE ON THE BRAIN

Laurel Trainor  
McMaster University

APPLYING COGNITIVE SCIENCE TO MUSIC ANALYSIS: A CASE STUDY OF MUSICALLY-  
EVOKED LAUGHTER

David Huron  
Ohio State University

In 1992, the Society's Music Cognition Interest Group sponsored a special session entitled "Theory and Evidence: An Interface with Cognitive Psychology." Chaired by Allan Keiler, the session featured three psychologists (Edward C. Carterette, W. Jay Dowling, and Carol Krumhansl) and two music theorists (Joseph Dubiel and Patrick McCreless). In the fifteen years that have intervened, the field has broadened dramatically. This session, with presentations by two music theorists and two cognitive scientists, seeks to capture some of these developments, touching upon ways that the two

disciplines have informed each other in recent decades. Carol Krumhansl provides a link with the previous SMT session: she will reflect upon ways music-cognitive research has changed since the 1992 session, including the design of experiments and stimuli, as well as influences from other fields, such as linguistics, computer science, neuroscience, and especially music theory. Fred Lerdahl will talk about the experience of collaborating across disciplines with Ray Jackendoff, Emmanuel Bigand, and Carol Krumhansl, with the common focus upon understanding musical tension and relaxation from a cognitive perspective. Laurel Trainor provides a window into the musical behavior of babies and young children, and discusses ways music development relates to other types of skill acquisition, memory, and even to changes in the structure and function of the developing brain. David Huron concludes by discussing different types of memory and the ways these types are echoed in musical organization. Since memory is the source of musical expectations, these types lead to different forms of expectation, as he demonstrates in works by Peter Schickele (P.D.Q. Bach). Following these presentations, we open the floor to questions and a panel discussion, to cover such topics as the academic challenges of interdisciplinarity, how music cognition “fits” within the discipline of music theory, and the pedagogy of music cognition.

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### Sunday Morning, 18 November

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#### **FORM AND FRAGMENT IN EARLY 19<sup>TH</sup>-CENTURY MUSIC** **Deborah Stein, New England Conservatory, Chair**

##### COVERING THE TRACES: OP. 81A AND BEETHOVEN’S TREATMENT OF FORM

L. Poundie Burstein  
Hunter College and City University of New York, Graduate Center

There is a notable clarity of form in Beethoven’s instrumental works prior to 1809, with most of the sections and subsections delineated by firm cadences. Starting in 1809, however, the cadential articulation of the form becomes much less prevalent in his works. A pivotal work in this regard is his Sonata for Piano in E-flat, Op. 81a. This work quite possibly was modeled on the earlier Sonata for Piano in E-flat, Op. 31, No. 3, for these two sonatas conspicuously share a number of features, although the obscuring of cadential delineations is far more daring in Op. 81a. The formal strategies seen in Op. 81a, many of which relate directly to its program, continue to play a role in Beethoven’s subsequent compositions. As such, in handling the narrative and expressive challenges of this characteristic sonata, Beethoven in turn developed techniques that would continue to exert an impact on the works of his later style.

##### A FRAGMENTARY LAMENT: SCHUBERT’S “AUS GOETHE’S *FAUST*” D. 126

Jeff Perry  
Louisiana State University

While “Gretchen am Spinnrade” D. 118, is widely viewed as Schubert’s first masterpiece in the *Lied* genre, its companion piece, “[Szene] Aus Goethe’s *Faust*” D. 126, is a more problematic work. One of the earliest of Schubert’s songs to begin and end in two different keys, it differs from songs such

as those analyzed in Krebs (1981), which unfold largely in terms of a progressive chain of third-related tonalities, in that it begins in C major and ends in B-flat minor. This paper provides an overview of the literary and musical context of Schubert's *Faust scena*, briefly examines the textual structure of the scene, and explores the musical structure and narrative design this enables. It then examines the pitch motives that help to connect the work's textual and musical processes, and finally proposes a new model of progressive tonality based on the concept of the Romantic fragment, a genre and sensibility explored by Daverio (1993), Rosen (1995) and Satyendra (1997) in the music of Schumann, Liszt and others, and clearly of relevance to Schubert's D. 126 as well.

HARMONIES HEARD FROM AFAR: TONAL PAIRING, FORMAL DESIGN, AND CYCLICAL  
INTEGRATION IN SCHUMANN'S A-MINOR VIOLIN SONATA,  
OP. 105

Peter H. Smith  
University of Notre Dame

The study of nineteenth-century music has been graced in recent years by renewed appreciation of Robert Schumann's musical achievements. It is still nevertheless the case that our monographs, essay collections, and journals are filled with many more analyses of the instrumental music of the Viennese masters than of Schumann. One fruitful point of departure for a program of study to remedy this situation is analysis of a composition that stands as one of Schumann's supreme achievements: the A-minor Violin Sonata of 1851.

The presentation explores ways in which the sonata adapts, to the context of traditional forms, techniques of tonal organization associated with Schumann's songs and piano works. The sonata contextualizes the technique of *tonal pairing*—the intertwining of two closely related tonics—as a basis for key relations in sonata and rondo form. A propensity for interwoven tonics stands at the heart of the sonata's integration of harmony, motive, and form, its deft tonal delays and blurred formal boundaries, and its cyclical unity. Following exploration of these issues in all three movements, the presentation concludes with observations about tonal pairing in Schumann's instrumental music generally, noting the composer's proclivity for *key-specific tonal pairs* such as A-minor and F-major (String Quartet, op. 41, no. 1 and Cello Concerto) and E-flat major and G-minor (Piano Quartet and Third Symphony).

THE INFLUENCE OF HARMONIC RHYTHM AND MELODIC PACING ON MUSICAL CLIMAX  
WITH PARTICULAR ATTENTION TO BRAHMS'S  
A-MAJOR VIOLIN SONATA

Austin T. Patty  
Lee University

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. Many climaxes, however, 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's Violin Sonata in A major, Op. 100, serve to illustrate pacing scenarios; this movement and the first movements from Brahms's other two violin sonatas, Opp. 78 and 108, serve as a sample repertoire for testing the pacing-scenario hypothesis, which predicts that pacing scenarios that contradict the pace-tension hypothesis, such as the struggle scenario, will occur frequently. Indeed, the two pacing scenarios that contradict the pace-tension hypothesis occur more frequently in this repertoire than do the two pacing scenarios that support it.

## **JUXTAPOSITIONS IN EARLY 20<sup>TH</sup>-CENTURY MUSIC**

**Mark DeVoto, Tufts University, Chair**

### **AUTOMATED RHYTHM IN *THE RITE OF SPRING***

Matthew McDonald  
Northeastern University

Much analytical writing on *The Rite of Spring* seems to have been motivated by a desire to discount notions of compositional "primitivism," attempting to demonstrate that *The Rite*, despite its apparent roughness and lack of systematization, possesses a coherent structure of audible musical relationships. This paper offers competing evidence, showing how many of *The Rite's* most celebrated rhythmic features arose from automated compositional procedures that are obscure, generate inaudible relationships, and are inherently unrelated to musical experience. Specifically, Stravinsky seems to have arrived at rhythmic and metric patterns via the mechanical translation of intervallic series, derived from prominent chords or melodies, into durational ones. This claim is supported by a wealth of analytic evidence, involving the openings of the majority of the titled sections of *The Rite*, where much of its best-known music resides. After outlining these various instances of the compositional procedure, the paper will go on to explore briefly how these analyses might inform us about Stravinsky's conception of *The Rite* when considered in conjunction with his programmatic commentary, the symbolic and numerical notations in the margins of his sketches, and his idiosyncratic ideas about intervals. It will conclude by reassessing our own conceptions of *The Rite*, including Theodor Adorno's notion of the work's "arbitrary" rhythm and Pieter Van den Toorn's critique of this view.

### **DIALECTICAL OPPOSITION BETWEEN TONAL AND ATONAL STRUCTURES IN BERG'S PIANO SONATA**

Benjamin Wadsworth  
Eastman School of Music

There are long traditions in musical analysis of viewing works in terms of the organic and dialectical metaphors. The organic metaphor applies a biological perspective to a work, viewing it as an organism with parts like the limbs on a body. The dialectical metaphor views the work as an in-time conflict or state of disunity. Sometimes the organic metaphor is privileged in music theory studies over the dialectical metaphor: for instance, Schenkerian theory often interprets higher-level harmonic structure as unifying more local dialectical oppositions in motives, texture, and so forth. In Berg's Piano Sonata Op. 1, however, the organic and dialectical metaphors nearly achieve a state of parity. Two harmonic systems (one a B-minor tonal frame, the other a system of interval-cycles pairing whole-tone

and chromatic sets) are established to a nearly equal extent, creating a bifurcated harmonic system instead of a unified syntax. In the absence of a unified musical language, is there still some thread that connects the multiple harmonic languages? Or is this work fundamentally incoherent? This paper investigates multiple types of unity in the Berg Sonata through both organicist and dialectical methods. The organicist methods, which include Schenkerian theory, pset theory, and theories of symmetry/cycles, are applied in a limited way so as to not weaken their criteria. In this regard the paper builds upon the analyses of Dave Headlam (1996) and Janet Schmalfeldt (1991). The dialectical method, which links the harmonic systems, proposes a model of musical narrative that traces the interaction of contour/rhythm motives and harmonic structure. This model of narrative proposes states of balance and imbalance as in Schoenberg (1995); it also adapts the triadic dialectical process of Hegel ([1807] 1977) to posit normative formal plans. This paper's mixture of organicist/dialectical approaches parallels the dual Hegel-Adorno approach of Vasili Byros (2006/2007).

## RESOLVING THE DEBATE ON MILHAUD'S POLYTONALITY

L. Christine Amos  
SUNY-Potsdam

Milhaud's polytonal music has proven to be enigmatic to both Milhaud's Parisian contemporaries in the 1920s and to current scholars. The debate regarding the polytonality or atonality of Milhaud's music persists in analyses today. This is reflected in current treatments, the most forward-thinking of which restrict themselves to either a set-theory or a post-Schenkerian approach. Although the set-theoretical approach successfully describes aggregate harmonies between and among contrapuntal strands, it does so at the cost of addressing the play of opposing tonalities. The post-Schenkerian approach remains tied to the concept of monotonicity and overrides competing tonalities to prioritize a primary one. Consequently, a new analytical approach, one which will fully respect the tonal multiplicity of Milhaud's music, is necessary.

My discussion will present a solution that accurately describes Milhaud's polytonal textures and retains the integrity of Milhaud's musical style, through an examination of works including *Saudades do Brazil* (1919) and *La Création du monde* (1923). My approach simultaneously affirms the irreducibility of the competing tonalities and suggests ways of bringing them into meaningful relationship with each other through two related concepts: Charles Koechlin's *jalón vertical* and Joseph N. Straus's tonal axis. This approach explains Milhaud's structural priorities for polytonal writing on the foreground, middleground, and background levels, while also retaining the integrity of Milhaud's contrapuntal style of composition.

## THE QUIET REVOLUTION OF A B-NATURAL: PROKOFIEV'S *NEW SIMPLICITY* IN THE SECOND VIOLIN CONCERTO

Deborah Rifkin  
Ithaca College

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 the pitch B-natural. As a result, the 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.

## **EVOLUTIONARY THEORY**

**Lawrence Zbikowski, University of Chicago, Chair**

### SPECIES CONCEPTS, ASSOCIATION CONCEPTS, AND MUSIC ANALYSIS

Dora A. Hanninen  
University of Maryland

In biology, systematics is the branch of study that “seeks to identify species and to organize them into higher taxa such as genera, families, orders, and kingdoms” (Sober 1993, 143). Although the neat taxonomies to which systematists aspire are far afield from the interpretive enterprise of contemporary music analysis, the variety of “species concepts” that biologists and philosophers of biology have advanced and used over the years is very suggestive in this regard, as ways of thinking about categories in general, and associations among musical segments in particular.

This paper has two parts. An introductory Part I outlines key features and primary challenges of four types of species concepts in biology: phenetic, biological, phylogenetic, and species as individuals. Part II interprets and adapts these species concepts as four “association concepts” for use in music analysis, focused on morphological similarity and associative configuration, population demographics and processes, origins and derivational history, and schemas and transformation of individuals, respectively. Using passages by Stravinsky, Feldman, and Xenakis, I illustrate and develop each association concept in some detail. Rather than lobby for any one view, my goal is to consider the merits and implications of different ways of thinking about musical association and to suggest that these can productively coexist in analysis.

### THE OVER-DETERMINED TRIAD, EVOLUTION, AND COGNITIVE PLAUSIBILITY

Richard Cohn  
Yale University

Neo-Riemannian theory has been criticized as cognitively implausible on the grounds that it implies that listeners are capable of switching between distinct syntactical systems in the course of a single moment. This paper argues that a combination of syntactical systems is necessary in order for significant stylistic change to occur. Accordingly, our challenge is to understand how such a

circumstance might be plausible from a cognitive perspective. What are the psychological circumstances that allow such a transition to occur at the level of the individual musician or listener at a particular historical moment? Models for achieving this understanding are invoked from evolutionary theory (after McCreless) and from studies of the development of natural language. Using common-sense evidence from everyday life, I posit two psychological principles—the opacity of over-determination and the opacity of causal reversal—that help us to understand some of the mechanisms that allow a listener to engage in spontaneous syntactic switching without “grinding the gears.” I conclude by sketching a model that describes the transition from diatonic tonality to atonality, assigning a crucial role to the triadic but non-diatonic syntactic routines of interest to neo-Riemannians.

## INTELLIGENT DESIGN

Jane Clendinning, Florida State University, Chair

### THE RULE OF THE CANON IN LIGETI'S *ÉTUDES POUR PIANO* (1985-2001)

Amy Bauer

University of California-Irvine

The three books of piano etudes stand as the culmination of Ligeti's storied career. Pierre-Laurent Aimard sums up their novelty and significance: “You still move your fingers over the keyboard, but everything else is different.” Canonic technique is the common thread that binds these virtuosic but disparate late works together. In this paper I will outline a “canonic narrative” running throughout the etudes, which culminates in the brief but definitive Etude No. 18 for piano.

This narrative begins in the first book of etudes, where canons are incorporated as an ancillary, almost subliminal element alongside other techniques such as harmonic passacaglia (No. 2), ostinato (Nos. 4 and 6), “chaotic” structure (No. 1), and blocked-key technique (No. 3). Canon emerges as an audible process in the second book of etudes, as pitch sequences become explicitly periodic and tempo variation is terraced to suggest the augmentation and diminution of constituent voices. The final book of etudes serves as a tribute to the form, with three of the four written as canons at the octave, two voices physically constrained by right and left hands. As canon dominates the texture in Book III, the harmonic language clarifies, becoming explicitly diatonic in the 15th etude and hexatonic in the 16th. The final “Canon” returns to its namesake's historical roots, as the body of the etude (written in straight eighth-notes, without barlines) is repeated *prestissimo*, to close with a gentle, canonic coda *lento con tenerezza*. “White on White” strips the conceit bare, as it were, revealing a stark, slow-moving diatonic canon near the end of the etudes's “story,” a canon that recalls its original definition as “a rule which, without any respect, reveals the secrets contained in the music.”

### CARL RUGGLES AND CHARLES SEEGER: STRICT VS. FREE IMITATION IN RUGGLES'S CANONS

Stephen Slottow

University of North Texas

Carl Ruggles first used canon in *Lilacs*, the second movement of *Men and Mountains* (1927). Thereafter canons grew increasingly important, growing in size and complexity until, in *Organum* (1947), they comprise most of the composition. There is something paradoxical in Ruggles's use of canon, in that the strictness of the device runs counter to the composer's preference for freely mutating



shapes and dislike of exact repetition. However, Ruggles's canons always strike a balance between strict and free repetition. This paper explores the different ways in which this is done, as well as the influence of Charles Seeger's dissonant counterpoint on Ruggles's canonic techniques. The paper discusses canons in *Lilacs*, *Sun-Treader*, and *Evocations 4*.