## PROGRAM

## and

## ABSTRACTS

# **Thirty-Second Annual Meeting**

# of the

# SOCIETY FOR MUSIC THEORY

October 28—November 1, 2009

Hyatt Regency Montréal

## SMT 2009 Annual Meeting

Edited by Peter Schubert, Joseph Kraus, and Christoph Neidhöfer

## **Program Committee**

Peter Schubert, *Chair*, Matthew Bribitzer-Stull, Hali Fieldman, Elizabeth H. Margulis, David Neumeyer, Steve Rings, Justin London (*ex officio*)

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### **Upcoming Annual Meetings**

2010: Indianapolis, Indiana, Marriott and Westin Hotels, November 4-7 2011: Minneapolis, Minnesota, Marriott City Center, October 27-30

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The Society for Music Theory warmly thanks the Schulich School of Music of McGill University for its generous support, especially for providing pianos for this meeting.

# PROGRAM

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## WEDNESDAY, 28 OCTOBER

2:00-5:30	Executive Board Meeting (Suite 1108)
6:00-7:00	Dinner for Executive Board, Publications Committee, Awards
	Committee, and Networking Committee (Café Fleuri A)
7:00-11:00	Awards Committee Meeting (Vaudreuil)
7:00-11:00	Networking Committee Meeting (Touraine)
7:00-11:00	Publications Committee Meeting (Lorraine)

## **THURSDAY, 29 OCTOBER**

8:00-12:00	Executive Board Meeting (Suite 1108)
9:00-5:00	Registration (Vestiaire Grand Salon)
1.00 (.00	$\Gamma_{1}(1,1) = (C_{1}, 1, 0, 1, 0, 0)$

1:00-6:00Exhibits (Grand Salon C)

#### THURSDAY AFTERNOON SESSIONS

#### 2:00–5:00 GEOMETRY AND ALGEBRA (ARGENTEUIL)

Ian Quinn (Yale University), Chair

Richard Plotkin (University of Chicago)
"Transformational Systems and Maximal Evenness: Analysis with Filtered Point-Symmetry"
Rachel Wells Hall (Saint Joseph's University)
"Two Geometrical Models for Modulation in Arab Music"
Brian Moseley (The Graduate Center, CUNY)
"Getting RICH: Chains and Space in Webern's Op. 22, ii"
Zachary Cairns (Eastman School of Music)
"Interval Class Succession Graphs in Edison Denisov's Sonata for Alto Saxophone"

#### 2:00–5:00 METRICAL DISSONANCE IN JAZZ (PICARDIE)

Robert Wason (Eastman School of Music), Chair

Stefan Love (Eastman School of Music)
"Metrical Dissonance in Bill Evans's 'All the Things You Are'"
Robert Hodson (Hope College)
"Meter & Rhythm in Bill Evans's 3/4 Playing"
Keith Waters (University of Colorado at Boulder),
Steve Larson (University of Oregon),
Henry Martin (Rutgers University–Newark), and
Steve Strunk (Catholic University)
"Circular Thinking—A Roundtable on 'Blue in Green' and 'Nefertiti'"
Tony Dunn (University of Ottawa)
"Negotiating Changing Metric Structures: Metrical Dissonance and Metrical Attention in a Jazz Performance"

#### 2:00–3:30 QUIET CITY (AUTEUIL)

David Kopp (Boston University), Chair

David Heetderks (University of Michigan) "A Tonal Revolution in Fifths and Semitones: Copland's *Quiet City*" Stanley V. Kleppinger (University of Nebraska–Lincoln) "The Tonal Drama of *Quiet City* and its Emergence from Copland's Sketches"

#### 3:30–5:00 POSTER SESSION (GRAND SALON C)

Hubert Ho (Northeastern University)

"Octatonicism, Timbre, and Pitch Salience in the Music of Bohuslav Martinů"

Jennifer Sterling Snodgrass (Appalachian State University) and

Jeff Lazenby (Appalachian State University)

"Collaborative Musical Analysis: The Integration of the Tablet PC into the Theory Classroom"

Dmitri Tymoczko (Princeton University)

"A Descending-Thirds Model of Functional Harmony"

#### EVENING MEETINGS AND EVENTS

5:00-5:30	Conference Guides Meeting (Anjou)
5:30-7:30	Opening Reception (Cash Bar) (Jeanne-Mance)

#### THURSDAY EVENING SESSIONS

#### 8:00–11:00 LEGACIES OF MESSIAEN IN RECENT CANADIAN COMPOSITION (AUTEUIL)

Heather White Luckow (McGill University)
"From France to Québec: Messiaen's Transatlantic Legacy"
Martine Rhéaume (Université de Montréal)
"Becoming Claude: Vivier's Main Melodies and their Evolution"
Stephanie Lind (Queen's University)
"Jacques Hétu's *Style composite*: A Transformational Approach to Modal Superimposition"
Roxane Prevost (University of Ottawa)
"Discovering a New Sound World: Messiaen's Influence in Steven Gellman's *Trikaya*"

Respondent: Jean Boivin (Université de Sherbrooke)

#### 8:00–11:00 PERSPECTIVES ON SONATA THEORY (ARGENTEUIL)

Warren Darcy (Oberlin College Conservatory of Music), Chair

Steven Vande Moortele (McGill University)
"Single-Movement Form, Multi-Movement Cycle, and the Double-Tonic Complex in Strauss's *Don Juan*"
Seth Monahan (Eastman School of Music)
"Criteria of 'Success' and 'Failure' in Mahler's Sonata Recapitulations"
Anne M. Hyland (King's College, University of Cambridge)
"Doubling the Development: Tonal Trajectories in the First Movement of Schubert's String Quartet in G Major, D. 887"
Graham G. Hunt (University of Texas at Arlington)
"The Three Kay Trimedular Plagk in Schubert and Probme's Sonata

"The Three-Key Trimodular Block in Schubert and Brahms's Sonata Expositions and its Classical Precedents"

#### 8:00–11:00 TIME BENDS (PICARDIE)

Christopher Hasty (Harvard University), Chair

Joti Rockwell (Pomona College)

"On Crooked Time: Metrical Disruption and Depth in American Roots Music"

Mitchell Ohriner (Indiana University)

"Temporal Segmentation and Prototypical Phrase Categories"

Samuel Ng (University of Cincinnati College-Conservatory of Music) "Musical Meanings in Two Performances of Chopin's Ballade in G Minor, Op. 23"

Noriko Manabe (Princeton University)

"Evolution of Japanese Text-Setting in Western Musical Style"

#### FRIDAY, 30 OCTOBER

Breakfast Reception for Graduate Students hosted by the
Professional Development Committee (Salon des Arts)
Committee on the Status of Women Breakfast Meeting
(Lorraine)
Job Interviews (Touraine)
Registration (Vestiaire Grand Salon)
Exhibits (Grand Salon C)
Graduate Student Workshop: "Music Theory Pedagogy"
(Anjou)
Graduate Student Workshop: "Schenkerian Analysis"
(Vaudreuil)

#### FRIDAY MORNING SESSIONS

#### 9:00–12:00 HISTORY OF THEORY (AUTEUIL)

Thomas Christensen (University of Chicago), Chair

Nathan Martin (Columbia University) "Rameau's '*Art de la basse fondamentale*' and Rousseau's *Dictionnaire de musique*"

Paul Murphy (SUNY Fredonia)

"A Frenchman in Madrid: Jean-Philippe Rameau's Influence on Speculative Music Theory in Spain"

John Z. McKay (Harvard University)

"Making Music from Universal Harmony: Influence and Innovation in Kircher's *Musurgia universalis*"

Bella Brover-Lubovsky (Jerusalem Academy of Music/Hebrew University) *"Il Cembalo de'colori, e la Musica degli occhi*: Newtonian Optics, Venetian Clouds, and Modal Polarity in Early Eighteenth-Century Music"

#### 9:00–12:00 JE ME SOUVIENS (PICARDIE)

Marianne Wheeldon (University of Texas at Austin), Chair

Michael Klein (Temple University)
"Debussy and the Three Machines of the Proustian Narrative"
Clare Sher Ling Eng (Yale University)
"Aspects of Post-Classical Cadential Design in Fauré's *Mirages*"
Andrew Pau (The Graduate Center, CUNY)
"Chromaticism, Motive, and Tonality in Bizet's *Carmen*"
Michael Puri (University of Virginia)
"Memory and Melancholy in the 'Epilogue' of Ravel's *Valses nobles et sentimentales*"

#### 9:00–12:00 PROBLEMS OF HARMONY (ARGENTEUIL)

Daniel Harrison (Yale University), Chair

Mark Spicer (Hunter College and The Graduate Center, CUNY)
"Absent Tonics in Pop and Rock Songs"
Evan Jones (Florida State University)
"The 'Content and Flavor' of Philip Glass's Harmonic Cycles"
Bruno Gingras (Goldsmiths College, University of London)
"Telescoped Harmonies and Functional Collisions in Baroque Contrapuntal Music: Three Types of Ambiguity"
Robert T. Kelley (Lander University)
"Sacred Harp Harmony: A Part-Writing Primer for Shape-Note Hymnody"

## NOONTIME MEETINGS AND LUNCHEON

12:00-2:00	Jazz Theory and Analysis Interest Group Meeting (Été des
12.00-2.00	Oueer Resource Interest Group Meeting (Salon des Arts)
12:00-2:00	Scholars for Social Responsibility Interest Group Meeting
	(Mont-Royal)
12:00-2:00	Diversity Committee Travel Grant Recipients Lunch
	(Exécutif)
1:00-3:00	CV Review Session (coordinated by the Professional
	Development Committee) (Anjou)
1:00-6:00	Job Interviews (Vaudreuil)

## FRIDAY AFTERNOON SESSIONS

#### 2:00–5:00 FORM AS PROCESS: CELEBRATING THE WORK OF JANET SCHMALFELDT (PICARDIE)

#### Sponsored by the Committee on the Status of Women

Brenda Ravenscroft (Queen's University, Kingston), Chair

Carissa Reddick (University of Oklahoma)

"Becoming at a Deeper Level: Divisional Overlap in Sonata Forms from the Late Nineteenth Century"

Mike Lee (Cornell University)

"A Response to Schmalfeldt's 'Form as Process of Becoming': Once More on the Performance and Analysis of Schubert's Sonata in A Minor, Op. 42"

William E. Caplin (McGill University)

"Beethoven's 'Tempest' Exposition: A Springboard for Form-Functional Considerations"

James Hepokoski (Yale University)

"Formal Process, Sonata Theory, and the First Movement of Beethoven's 'Tempest' Sonata"

Janet Schmalfeldt (Tufts University)

"One More Time on Beethoven's 'Tempest,' from Analytic and Performance Perspectives"

## 2:00–5:00 TONE AND MEANING IN EARLY MUSIC (ARGENTUIL)

Jennifer Bain (Dalhousie University), Chair

Jared C. Hartt (Oberlin College Conservatory of Music) "Structural Implications of Isorhythmic Design in Guillaume de Machaut's Motets" Sarah Fuller (Stony Brook University)
"Concerning Gendered Discourse in Medieval Music Theory: Was the Semitone 'Gendered Feminine?'"
Kyle Adams (Indiana University)
"A Preliminary Inquiry into Sixteenth-Century 'Modality' in Selected Works by Josquin"
Mark Yeary (University of Chicago)
"In Their Own Native Keys': Tonal Organization in William Byrd's Published Motets" **2:00–5:00** GROOVES AND CLIMAXES (AUTEUIL)
Ellie M. Hisama (Columbia University), Chair

Robin Attas (University of British Columbia) "Meter as Process in Pop Song Introductions: Groove Buildups, Level Shifts, and a Few 'Bad Girls'" Stephen Taylor (University of Illinois at Urbana-Champaign)

"Rhythm Necklace and Hemiola: Hidden Meter in Radiohead and Björk" Brad Osborn (University of Washington)

"Subverting the Verse/Chorus Paradigm: Terminally-Climactic Form in Recent Rock Music"

#### EVENING MEETINGS AND EVENTS

5:00-7:00	Joint Mathematics of Music Analysis and Music and
	Philosophy Interest Group Meeting (Salon des Arts)
5:00-7:00	Demographics Ad-hoc Committee Meeting (Mont-Royal)
5:00-6:00	Oxford University Press Reception (Grand Salon C, OUP
	Booth)
8:00-11:00	Jazz Jam Session (Picardie)

#### FRIDAY EVENING SESSIONS

#### 8:00–11:00 CARTER 101 (AUTEUIL)

Guy Capuzzo (University of North Carolina-Greensboro), Chair

Joshua B. Mailman (Eastman School of Music)
"An Imagined Drama of Competitive Opposition in Carter's Scrivo in Vento"
Jason Hooper (University of Massachusetts Amherst)
"A Transformational Approach to Harmony and Voice Leading in Elliott Carter's Recent Music"
Michael Buchler (Florida State University) and
Alan Theisen (Florida State University)
"Elliott Carter and the Sorcerer's Stone: All-Interval Tetrachords as

Musical Building Blocks"

Patrick Budelier (Illinois Wesleyan University)

"Maximizing the Miniature: Signature Chords and Covert Means in Elliott Carter's Latest Music"

#### 8:00–11:00 SOUNDS OF SADNESS (ARGENTEUIL)

Parag Chordia (Georgia Institute of Technology) Matthew Davis (Ohio State University) David Huron (Ohio State University) Kelly Jakubowski (Ohio State University) Brandon Paul (Ohio State University) Olaf Post (Harvard University) Alex Rae (Georgia Institute of Technology) Laura Tiemann (Ohio State University) Gary Yim (Ohio State University)

Olaf Post, Gary Yim, Kelly Jakubowski, Brandon Paul, and Laura Tiemann "Parallels Between Sad Music and Sad Speech"
Gary Yim, David Huron, Parag Chordia, and Matthew Davis "The Effect of Scale Organization on Perceived Sadness"
Parag Chordia and Alex Rae "What Emotions do *Raags* Evoke? An Internet-Based Survey of Listener Responses"
David Huron "A Theory of Music and Sadness"

## SATURDAY, 31 OCTOBER

7:00-8:30	Regional and Affiliate Societies Meeting (Anjou)
7:00-8:30	Professional Development Committee Breakfast Meeting
	(Vaudreuil)
7:00-8:30	Diversity Committee Breakfast Meeting (Lorraine)
7:30-9:00	Disability and Music Interest Group Meeting (Mont-Royal)
8:00-12:00	Job Interviews (Touraine)
8:30-5:00	Registration (Vestiaire Grand Salon)
8:30-6:00	Exhibits (Grand Salon C)

#### SATURDAY MORNING SESSIONS

#### 9:00–12:00 SOUND UNBOUND (AUTEUIL)

John Covach (University of Rochester and Eastman School of Music), Chair

Kevin Holm-Hudson (University of Kentucky)

"Symmetries and Schizophrenic Markers: Progressive Rock's Politics of Experience"

Eric Drott (University of Texas at Austin) "Fraudulence and the Gift Economy of Contemporary Music" Stephen Decatur Smith (New York University) "The Sound of the Non-Existent: Music and Adorno's Ontological Strain" Don McLean (McGill University) and Sandy Pearlman (McGill University)

"Bruckner & Heavy Metal: From 'Chord Power' to 'Power Chord""

#### 9:00–10:30 TRAGIC NARRATIVES (ARGENTEUIL)

Byron Almén (University of Texas at Austin), Chair

Joseph Kraus (Florida State University) "Levels of Nostalgia and Narrative Collapse in the 'Pastorale' from Tchaikovsky's Manfred Symphony" Frank Lehman (Harvard University) "An Appetite For Patterns: Analyzing Transformation in Horner's A

"An Appetite For Patterns: Analyzing Transformation in Horner's A Beautiful Mind Score"

#### 9:00–10:30 PHYSICALITIES I (PICARDIE)

Marion A. Guck (University of Michigan), Chair

Brian Kane (Yale University)

"Excavating Lewin's 'Phenomenology""

Arnie Cox (Oberlin College Conservatory of Music)

"Theorizing Musical Affect: Arvo Pärt's Passio (1982)"

#### 9:00–10:30 COMPLEXITY AND CONTOUR (HOSPITALITÉ)

Elizabeth West Marvin (Eastman School of Music), Chair

Aleksandra Vojcic (University of Michigan)

"Recasting Medieval Complexity in the Piano Sonata by Peter Maxwell Davies"

Mustafa Bor (University of Alberta)

"Window Algorithms: A Theory of Contour Reduction for Post-Tonal Music"

#### 10:30–12:00 BACH (ARGENTEUIL)

William Renwick (McMaster University), Chair

Mark Anson-Cartwright (Queens College and The Graduate Center, CUNY) "Ritornello Conventions, Formal Ambiguity, and Closure in J. S. Bach's Concertos"

#### 10:30–12:00 PHYSICALITIES II (PICARDIE)

Julian Hook (Indiana University), Chair

Neil Minturn (University of Missouri) and M. Rusty Jones (Butler University) "Toward a Theory of Keyboard Topography" Anna Gawboy (Yale University) "The Wheatstone Concertina and Symmetrical Arrangements of Tonal Space"

#### 10:30–12:00 FORMAL PROCESSES IN SCHNITTKE AND SAARIAHO (HOSPITALITÉ)

Yayoi U. Everett (Emory University), Chair

Bryn Hughes (University of Western Ontario)

"Out With the Old and In With the New—or—Out With the New and In With the Old: Voice-Leading Strategies in the First Movement of Alfred Schnittke's Concerto for Choir"

Crystal Peebles (Florida State University)

"Oppositions and Metamorphosis: Timbre in Saariaho's Château de l'âme"

#### NOONTIME MEETINGS AND LUNCHEON

12:00-2:00	Committee on the Status of Women Brown Bag Open Lunch
	(Été des Indiens)
12:00-2:00	Music Cognition Interest Group Meeting (Anjou)
12:00-2:00	Performance and Analysis Interest Group Meeting (Salon
	des Arts)

#### SATURDAY AFTERNOON SESSIONS

#### 2:00–3:30 KEYNOTE ADDRESS (GRAND SALON BC)

Susan McClary (University of California, Los Angeles) "In Praise of Contingency: The Powers and Limits of Theory"

#### 3:45–4:00 SMT AWARDS PRESENTATION (GRAND SALON BC)

#### 4:00–5:30 SMT BUSINESS MEETING (GRAND SALON BC)

#### **EVENING MEETINGS**

5:30-7:30	Music Informatics Interest Group Meeting (Salon des Arts)
5:30-7:30	Music Theory Pedagogy Interest Group Meeting (Anjou)
5:30-7:30	Popular Music Interest Group Meeting (Été des Indiens)
6:00-8:00	University of Michigan Alumni Party (Alfred-Rouleau C)

#### SATURDAY EVENING SESSIONS

#### 7:00–11:00 LISTENING THROUGH TIME: PSYCHOLOGICAL AND MUSIC-THEORETICAL PERSPECTIVES ON THE TEMPORAL DYNAMICS OF MUSICAL LISTENING

#### Sponsored by the Music Cognition Group

# *Please note that this event will take place at McGill University in Tanna Schulich Hall, 527 Sherbrooke Street West.*

Johanna Devaney and Michel Vallières (McGill University), Organizers

Richard Ashley (Northwestern University) Steven Larson (University of Oregon) Judith Lochhead (Stony Brook University) Stephen McAdams (McGill University) Jonathan Wild (McGill University)

With the participation of the Orpheus Singers of Montréal, the Cecilia StringQuartet and D. Andrew Stewart

Starting at 7 p.m., the people participating in the experiment will be hooked up to the experimental equipment and instructed in its use. The concert will begin at 8 p.m., followed by a presentation about the experiment at 8:30 and a panel discussion on the temporal dynamics of musical listening at 9:00. Those interested in participating can register online at

www.cirmmt.mcgill.ca/activities/workshops/research/smt/registration.

#### 8:00–11:00 THEORIES AND AESTHETICS: AN HISTORICAL RECONSIDERATION OF SERIALISM AS PRACTICE (ARGENTEUIL)

Chris Shultis (University of New Mexico) *"Faux Amis*: Cage, Boulez, Adorno"
Irna Priore (University of North Carolina at Greensboro) *"Theories of History: Serialisms in the Late 1950s Europe"*Richard Hermann (University of New Mexico) *"Early Serialism in the United States"*Bruce Quaglia (University of Utah) *"Common Practice vs. Intertextual Relation in Late Stravinsky and Wuorinen"*Respondent: Robert Morris (Eastman School of Music)

# 8:00–11:00 THE TEACHING COMPONENT OF THE JOB INTERVIEW (PICARDIE)

#### Sponsored by the Professional Development Committee and the Music Theory Pedagogy Interest Group

Maureen Carr (Penn State University), Moderator

The session is designed to help graduate students prepare for job interviews by giving them an opportunity to showcase their philosophy of teaching through a twenty-minute demonstration of teaching. Three doctoral students (chosen by a subcommittee consisting of members of the PDC and the Pedagogy Interest Group) will present a short lesson on a music theory topic of their choice to a group of volunteer students:

Sara Bakker (Indiana University) "Teaching Ternary Forms" Matthew Steinbron (Louisiana State University) "Introduction to Species Counterpoint for Beginners" Jennifer Weaver (University of North Texas) "Introduction to Secondary Dominants in Major Kevs"

A panel of faculty members representing five different types of institutions will provide responses to the teaching demonstrations:

- Ken Stephenson, Professor of Music Theory (University of Oklahoma, a public university with large theory classes)
- Gary S. Karpinski, Professor of Music Theory (University of Massachusetts Amherst, a public university with smaller theory classes)
- Elizabeth West Marvin, Professor of Music Theory (Eastman School of Music, a conservatory)
- Elliott Schwartz, Composer and Professor of Music, Emeritus (Bowdoin College, a small liberal arts college)
- Rob Jenkins, Associate Professor of English and Director of the Writers Institute (Georgia Perimeter College, a community college)

## SUNDAY, 1 NOVEMBER

- 7:00-9:002009/2010 Program Committees Breakfast Meeting (Anjou)8:00-9:00Interest Groups and Standing Committees Breakfast Meeting<br/>(Vaudreuil)
- 8:30–12:00 Exhibits (Grand Salon C)

#### SUNDAY MORNING SESSIONS

#### 9:00–12:00 SCHEMATA AND TOPOI (AUTEUIL)

Robert Gjerdingen (Northwestern University), Chair

Vasili Byros (Indiana University)

"Revisiting Schema Theory"

Danuta Mirka (University of Southampton)

"Parentheses and Loops: On the Perceptual Reality of Phrase Expansions"

Peter Kaminsky (University of Connecticut)

"(Whose) Performance and (Whose) Analysis: Toward a Pedagogical Approach"

Morwaread Farbood (New York University)

"The Influence of Time and Memory Constraints on the Cognition of Hierarchical Tonal Structures"

#### 9:00–12:00 THEORY AND PRACTICES IN THE TWENTIETH CENTURY (ARGENTEUIL)

Judy Lochhead (Stony Brook University), Chair

Meghann Wilhoite (New York City) "Stitching Patterns and the Sketches of Morton Feldman" August Sheehy (University of Chicago) "Sympathetic Vibrations: György Ligeti's 'Cordes à vide' and the Discourses of Theory" Philip Stoecker (Hofstra University)

"Aligned Cycles in Thomas Adès's Piano Quintet, Op. 20" Inessa Bazayev (Louisiana State University) "Triple Sharps, Qn Relations, and Synthetic Chords in the Works of Nicolai Roslavets"

#### 9:00–12:00 SONGS AND SEQUENCES (PICARDIE)

Steve Laitz (Eastman School of Music), Chair

Adam Ricci (University of North Carolina at Greensboro) "Non-Coinciding Sequences" Ryan McClelland (University of Toronto) "Sequence as Culmination in the Chamber Music of Brahms" Daniel B. Stevens (University of Delaware) "You Kiss Me as We Part': Unifying Techniques in Two Brahms Song Pairings" David Bretherton (University of Southampton) "Reprise in Schubert's Late Ternary Songs"

**ABSTRACTS** 

## **GEOMETRY AND ALGEBRA**

Ian Quinn, Yale University, Chair

#### **Transformational Systems and Maximal Evenness: Analysis with Filtered Point-Symmetry** Richard Plotkin, University of Chicago

Filtered Point-Symmetry (FPS) is a relatively new transformational theory that provides a practical means of manipulating iterated maximally even sets over time. The system is grounded in mathematics, but can be expressed with simple geometry, keeping it accessible to those without any previous mathematical training. FPS can be configured in many musically meaningful ways, and the configuration I use provides a robust transformational space for exploring diatonic music. I will demonstrate its application in analysis by using generated tonal networks and graphic animations in conjunction with an examination of pattern and chromaticism in Chopin's E Major Prelude (op. 28, no. 9).

#### Two Geometrical Models for Modulation in Arab Music Rachel Wells Hall, Saint Joseph's University

Although Arab music theorists have primarily discussed the static properties of magamat (Arabic melodic modes), modulation between magamat plays a central role in composition, improvisation, and performer training in modern Arab music (Marcus 1989, 1992, 2007). Arab performers and theorists describe magamat as being "close" or "distant" from each other based on the ease of modulation between them. However, no explicit geometric representations of these relationships exist. In contrast, Western scholars have developed quite a few geometric models representing relationships between Western modes. The techniques of geometrical music theory (Callender, Quinn, and Tymoczko 2008) represent a central class of Arabic modes in a fourdimensional lattice that also conveys information about the tetrachordal construction of magamat—a primary determinant of modulatory possibilities. SplitsTree, an application designed by Huson and Bryant (2006) to compute evolutionary trees or networks, is used to display magamat in networks representing the amount of chromatic alteration required to modulate from one mode to another. This notion of distance

accords well with studies of Arab musical practice (Marcus 1989, 1992, 2007; Nettl and Riddle 1973). Analysis of Arab modes suggests possibilities for the study of other music that uses the tetrachordal construction, including Turkish, Persian, Indian, ancient and modern Greek, and medieval church music. Moreover, although there are dangers in cross-cultural analysis, this study casts new light on models used in Western music theory.

#### Getting RICH: Chains and Space in Webern's Op. 22, ii Brian Moseley, The Graduate Center, CUNY

The amorphous character of the second movement of Webern's op. 22 Ouartet for Violin, Clarinet, Saxophone and Piano has often been defined in contrast to the more "controlled" handling of the twelve-tone technique in the first. In this paper, I discuss the second movement of op. 22, not in an attempt to explain difficult passages as more straightforward than previously thought, but in order to understand a compositional environment in which the movement operates. To construct this environment. I begin by considering the properties and byproducts of various types of row elision-a transformation David Lewin termed RICH. Properties of elided rows are used to create row families that are distinguished by specific criteria and are used to build a twelve-tone space. Throughout this paper, I use animations that navigate the space as a way to discuss features of musical form. While it may be true that the musical surface of op. 22, ii betrays little of the order and tidiness associated with the first movement, this paper shows that its substructure is elegantly constructed. The twelve-tone space and resulting analysis do not explain away the movement's surface turbulence, but they do give some insight into some organizational schemes within which this tumult operates.

> Interval Class Succession Graphs in Edison Denisov's *Sonata for Alto Saxophone* Zachary Cairns, Eastman School of Music

This paper celebrates the 80th anniversary of the birth of Soviet/Russian composer Edison Denisov (1929-1996) by examining the third movement of his Sonata for Alto Saxophone and Piano. In this movement, much of the pitch material is derived from two distinct twelve-tone rows, but a significant portion of the pitch material is not

based on any row at all. The main focus of this analysis is the relationship of the two rows to each other, and the relationship of the serial and non-serial music. To this end, I will introduce an analytical tool I call the interval class succession graph (ICSG).

An ICSG is a simple, graphic way to represent the ordered interval class content of a twelve-tone row. Each of the graph's nodes represents a single interval class that occurs between adjacent pitch classes in the row, and these nodes are connected by arrows that show the successions of interval classes found in the row. An ICSG is intended to capture the full range of possible interval class successions in a twelve-tone row.

I will demonstrate how comparison of the ICSGs of the Sonata's two rows reveals a structural similarity that may be otherwise overlooked. This section of the paper will focus primarily on the inclusion relation between two graphs. Finally, I will show several analytical examples where the ICSG of one of the Sonata's rows is used in a non-serial context.

## METRICAL DISSONANCE IN JAZZ

Robert Wason, Eastman School of Music, Chair

#### Metrical Dissonance in Bill Evans's "All the Things You Are" Stefan Love, Eastman School of Music

Bill Evans's solo recordings reveal his keen ability to disrupt the meter. Specifically, he superimposes conflicting metrical layers (grouping dissonance) and shifts the apparent downbeat forward or back (displacement dissonance). The lack of ensemble support makes these effects all the more dramatic. In this paper, I discuss Evans's version of "All the Things You Are" from the album *Alone*, with the aim of answering the following two questions: 1) What types of dissonance does Evans employ? 2) How does he prepare, sustain, and resolve these dissonances?

While several theorists have analyzed metrical dissonance in jazz (e.g., Larson 2006, Downs 2002, Waters 1997), they have focused on grouping dissonance; prior discussion of displacement has been limited and unsystematic. To describe Evans's rhythmic techniques, including many astonishing instances of displacement, I adapt Harald Krebs's notation for metrical dissonance, as presented in his book *Fantasy Pieces*. This description opens avenues for further research on metrical dissonance in Evans's music and in the work of other artists.

#### Meter & Rhythm in Bill Evans's 3/4 Playing Robert Hodson, Hope College

This paper will examine aspects of jazz pianist Bill Evans's playing in 3/4 time. While Evans's rhythmic and metric creativity is clearly evident in his performances of compositions in the more common 4/4 time, his playing in 3/4 often demonstrates a particularly remarkable metric and rhythmic genius. The paper will focus primarily on the Bill Evans Trio's performance of "Alice in Wonderland" before briefly considering two additional performances — "Waltz for Debby" and "Let's Go Back to the Waltz" — in which some of the metric and rhythmic possibilities presented in "Alice" come to fruition.

To discuss these performances, I will draw upon two relatively recent theoretic/analytic models of rhythmic and metric organization: Harald Krebs's *metric dissonance* and Richard Cohn's *ski-hill graphs*. These models will be used to explore passages in which wide varieties of metric dissonance are used in various ways, from simple displacement dissonances to complex passages in which all three trio members are improvising parts that create divergent metric states with hemiolas at multiple levels between each pair of musicians.

Circular Thinking—A Roundtable on "Blue in Green" and "Nefertiti" Keith Waters, University of Colorado at Boulder Steve Larson, University of Oregon Henry Martin, Rutgers University-Newark Steve Strunk, Catholic University

Herbie Hancock described one of his mid-1960s jazz compositions by saying "it doesn't have any cadences; it just keeps moving around in a circle." Many such "circular tunes" emerged in the 1960s, and were particularly associated with Miles Davis. Circular tunes contain an intriguing formal overlap that both requires and camouflages the return to the top of each chorus. Musical events taking place at the end of the chorus avoid closure and link to the return at the top, which then no longer sounds like a beginning.

In our co-authored presentation, we examine two circular tunes: "Blue in Green" (attributed to Miles Davis, but probably composed by Bill Evans, from their seminal 1959 recording *Kind of Blue*) and Wayne Shorter's "Nefertiti" (from Davis's 1967 album *Nefertiti*). Our analyses of the harmonic, voice-leading, and hypermetric aspects of these tunes (and of our own transcriptions of passages drawn from these recordings) suggest that Hancock's comment about cadence avoidance captures one important part of their structure. But we also reveal how these compositions go beyond cadence avoidance and rely on pattern completion to create circularity, and show how strategies for closure and continuity enhance formal ambiguity in jazz composition and improvisation.

#### **Negotiating Changing Metric Structures: Metrical Dissonance and Metrical Attention in a Jazz Performance** Tony Dunn, University of Ottawa

Jazz musicians are constantly communicating during their improvised performances. This paper focuses on the interactions that shape the overall metric structure in a recorded performance of Ron Carter's *Blues for DP*. During this performance the musicians transition from an initially established 12/8 meter to new double-time meters. Numerous musical indicators suggest that these changes are negotiated in real time. By tracking these indicators I argue that the fluid metric shifting results from metrical dissonance.

The interactive process will be highlighted through a reduction of transcribed musical selections to their fundamental rhythmic and metrical components. By highlighting only the metrical structures and by grounding the analysis in the metrical models as set forth by Harald Krebs and Christopher Hasty, the interactive process of "suggesting," "responding to," and "settling on" will be outlined. Krebs's grouping dissonance (Gx/y) and displacement dissonance (Dx+y) labels quantify the moments of metrical dissonance. Hasty's model, as set forth in *Meter as Rhythm*, accounts for the listener's perceptions of the resulting metrical dissonances.

This paper concludes by outlining the following interactive tendencies that result from metrical dissonance. First, there is a tendency for the soloist to initiate the interactive suggestions. Second, there is a consistency in the type of metrical dissonance introduced—Krebs's G4/3 and G3/2—and to where the "settling on" occurs—in the 'turnaround' section of the form. And finally, isolated moments of musical dissonance occur when there is no metrical response.

## **QUIET CITY**

David Kopp, Boston University, Chair

#### A Tonal Revolution in Fifths and Semitones: Copland's Quiet City David Heetderks, University of Michigan

Tonal ambiguity in Aaron Copland's music, and its relation to his expressive aims, is a topic that recurs occasionally in critical commentary. This paper argues that this ambiguity is symptomatic of a radical reorganization of the constituent elements of tonality, and demonstrates this through an analysis of *Quiet City* that uses models of harmonic relation developed by Robert Morris, Stephen Brown, and Joseph Straus.

The pitch relations used in the work can be modeled through a *Tonnetz* generated by a perfect fifth and semitone. In the opening section, *pattern completion*, a voice-leading technique in which the missing note of a collection established as normative conspicuously sounds in order to complete it, articulates points of arrival. Pitches take privileged status through emphasis by a prominent melodic voice and by acting as the axis of inversion of the collection. The motion toward the climax shows a large-scale inversional relationship of two diatonic collections around C, mirroring the inversional symmetry around C in the original pentatonic collection.

This analysis shows that Copland transformed the relations among the constituent elements of tonality in order to further explore potentials of the tonal system, an aesthetic goal to which he himself subscribed.

# The Tonal Drama of *Quiet City* and its Emergence from Copland's Sketches

Stanley V. Kleppinger, University of Nebraska-Lincoln

Aaron Copland's *Quiet City* (1940), a one-movement work for trumpet, English horn, and strings, derives from incidental music the composer wrote for an unsuccessful and now-forgotten Irwin Shaw play. This paper will explore the details of *Quiet City's* pitch structure, suggesting dramatic parallels between the music and what is known of Shaw's play.

The piece's outer sections hinge upon the same anhemitonic pentatonic collection. This collection is the source of significant pitch centers for the whole composition—that is, the most-stressed pitch classes of each section together replicate the collection governing the music's first and last measures. This principle, and the music's exceptions to it (especially at the work's climax), generate a remarkable correspondence to the internal struggles of Shaw's protagonist, Gabriel Mellon.

In addition, *Quiet City* offers a distinctive opportunity to observe the composer's assembly of a unified tonal structure. Copland's sketches for the work shed light on the process by which he created a tonally coherent musical work from a set of cues originally meant to underscore a play. Study of these sketches will allow us to observe the composer altering his original material to reinforce tonal connections across the span of the piece.

## **POSTER SESSION**

#### Octatonicism, Timbre, and Pitch Salience in the Music of Bohuslav Martinů Hubert Ho, Northeastern University

Recent theorists have debated octatonicism's ability to integrate the diatonic and chromatic elements of much early twentieth-century music. While many analyses rely primarily on pitch structure, recent research in the field of music perception and cognition has provided analysts with tools for using timbre as an essential element in delineating form. Timbre is dependent upon a number of variables including but not limited to: spectral content, loudness, attack characteristics, and pitch itself. The attractiveness of timbre as an analytical paradigm lies in its potential to permeate an entire musical work as it proceeds in time, perhaps doing for sound what Schenkerian analysis does for pitch in tonal music.

In the course of mapping out a terrain in which timbre operates, this study invokes the Terhardt/Parncutt model of pitch perception, in particular the notions of pitch salience, pitch commonality, and critical bandwidth. The notion of "timbral harmony" as a structural entity is posited. Using short examples from Bohuslav Martinů's *Fourth Symphony* and *Memorial to Lidice*, in combination with psychoacoustical analysis of representative recordings, I examine how Martinů utilizes timbral-harmonic complexes in his orchestrational technique as a way of mediating octatonic and diatonic aspects of the music.

The goal is not to turn musical works into listening exercises, nor to use cognition results to validate any particular way of hearing, but rather to use psychoacoustic knowledge to inform musical readings, and to seek that elusive middleground between what Nicholas Cook calls "attention-driven" listening and perception-driven "pre-attentive" listening.

#### **Collaborative Musical Analysis:** The Integration of the Tablet PC into the Theory Classroom Jennifer Sterling Snodgrass and Jeff Lazenby, Appalachian State University

Over the past two years, the faculty at Appalachian State University has integrated the Tablet PC into the music theory classroom. Undergraduate music students now have the ability to create musical analysis files using the Tablet PC. A recent study examined the benefits of the Tablet PC in regards to collaboration and cognitive learning. A secondary goal of this study was to create an awareness regarding the benefits of the Tablet PC through an open-source Web site highlighting student musical analysis.

This presentation will focus on the results of this study. including the qualitative analysis from student learners and external evaluators. Several topics will be presented in regards to the efficacy of the tablet PC in the music classroom including: collaborative analysis, dictation exercises, personalized and immediate feedback, music theory lecture, and interactions among students. The second goal for this study was to create an open-source Web site highlighting the uses of the Tablet PC in music. The site currently offers other music students and instructors the ability to view sample analyses and to listen to highquality musical recordings. The presentation will conclude with a demonstration of a Web site created to highlight student analyses.

#### A Descending-Thirds Model of Functional Harmony Dmitri Tymoczko, Princeton University

Traditional harmonic theorists offer various characterizations of the harmonic regularities in functional tonality. To evaluate them, we need a substantial body of machine-readable harmonic analyses. In my presentation I report on what is perhaps the first attempt to create a large, public database of this sort: analyses of the complete Mozart piano sonatas, assembled (and proofread) by more than two dozen professional theorists. Following a few methodological remarks, I use this database to test a new model of functional harmony, one that interacts in interesting ways with recent geometrical models of musical structure. The model, which features the descending circle of thirds-related diatonic triads,

accounts for 95% of the progressions in the complete Mozart piano sonatas, with almost all of the exceptions falling into a few familiar categories. I then consider tonal sequences, showing that the descendingthirds model suggests a surprising connection between the procedures of "harmonic" and "sequential" tonality. Finally, I distinguish three ways to understand the relation between traditional and Schenkerian theory, which I call compatibilism, holism, and incompatibilism. I argue that the success of the descending-thirds model suggests that compatibilism is the best alternative.

Thursday evening, 29 October

## LEGACIES OF MESSIAEN IN RECENT CANADIAN COMPOSITION

Jean Boivin, Université de Sherbrooke, Respondent

From France to Québec: Messiaen's Transatlantic Legacy Heather White Luckow, McGill University

Québec's New Music scene of the 1950s and 60s owes much to the training of Québécois composers in France. Although they worked as students under the tutelage of several legendary French teachers, Olivier Messiaen was arguably the most influential. This paper demonstrates the gradual emergence and adaptation of Messiaen's techniques in the music of the three of his Québécois students—Serge Garant (1929-1986), Clermont Pépin (1926-2006) and André Prévost (1934-2001)—through an analysis of selected works composed before, during, and immediately after their studies with Messiaen.

While the three developed different musical styles, their compositional techniques have much in common, which I attribute, in part, to the influence of their teacher. Garant emulated his teacher's ideas most literally, but only for a very short time. Pépin found the modes of limited transposition especially appealing, while Prévost gravitated towards the symmetrical permutations. My analyses draw upon information from compositional sketches housed in archives in Montréal and Ottawa, program notes and prefaces to scores, the composers' selfanalyses, and their recollections about their experiences with their teacher.

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#### Becoming Claude: Vivier's Main Melodies and their Evolution Martine Rhéaume, Université de Montréal

Composers, performers, and critics alike consider the music of Canadian composer Claude Vivier (Montréal, 1948-Paris, 1983) as unique and personal, yet it is often described through the influences it shows. However, after analyzing the structure of several musical works, it is possible to explain what constitutes its original style. This paper aims to describe the internal dynamics of an important aspect of Claude Vivier's melodic style: the main melodies. Through paradigmatic analysis (Ruwet 1972; Nattiez 2003), I observe melodic repetitions and transformations within a single work and from one to another, in order to reconstitute the evolution of Vivier's melodic style. These analyses have shown how the main melody became an important feature of his style. Through excerpts of paradigmatic analyses, this paper shows that Vivier's practice of main melody takes its roots in earlier works like Chants (1973), and then how the main melody and its transformations in Lettura di Dante (1974) are linked to those of the later long works like Journal (1977) and Lonely Child (1980), and how the device is tested to its full extent in a short work such as Pianoforte (1975).

#### Jacques Hétu's Style composite: A Transformational Approach to Modal Superimposition Stephanie Lind, Queen's University

Jacques Hétu (b. 1938), a French-Canadian composer based in Montréal, is known for a style that blends octatonicism, chromaticism, a focus on repeated melodic units, and Neo-Classical formal structures. His pitch structures frequently employ the modes of limited transposition and a superimposition of independent melodic layers, suggesting the influence of his teachers Clermont Pépin (a former student of Messiaen) and Messiaen himself.

Because Hétu adapts Messiaen-inspired elements in relatively consistent ways, an analysis of his works lends itself well to the use of transformational theory. This presentation details two methods by which Hétu associates superimposed layers: by adding an additional pitch class to a symmetrical collection in order to create musical layers with common subsets, and by combining layers that incorporate similar subsets or transformational motives. Both methods can be expressed through transformations and network isography. By comparing the resulting analyses to previous analyses of Bartók, Stravinsky, and Messiaen, these transformational techniques will outline the defining features of Hétu's compositional style. I will analyze excerpts from several of Hétu's works including the *Variations for piano*, op. 8 (1964), *Prélude*, op. 24 (1977), *Aria*, op. 27 (1977), *String Quartet no. 2*, op. 50 (1991) and *Sonate*, op. 35 (1984).

#### **Discovering a New Sound World: Messiaen's Influence in Steven Gellman's** *Trikaya* Roxane Prevost, University of Ottawa

In his Technique de mon langage musical, Olivier Messiaen outlines some key compositional devices, among which he includes his modes of limited transposition. Messiaen's harmonic language profoundly influenced a generation of young Canadian composers who had studied with him (Boivin 1995). Several scholars have examined Messiaen's harmonic language and the implications of using symmetrical collections, as well as Messiaen's inclusion of foreign pitch classes in his modes. Among these scholars, Forte (2007) explores Messiaen's "unusual chords" through a set-theoretical and pitch-class set genera perspective as a way to illuminate Messiaen's harmonic syntax, while Bernard (1986) examines the correlation between Messiaen's choice of chords and the composer's association between sound and colors. Neidhöfer (2005) offers a different perspective by approaching Messiaen's music as voice leading and counterpoint through modal step classes. In this paper, I explore how Gellman modified Messiaen's modes and adopted flexible rhythmic structures as a way to create diversity and unity in Trikaya. Gellman was influenced profoundly by Messiaen's teachings and successfully integrated the master's compositional techniques into his own to create a distinct compositional style.

## PERSPECTIVES ON SONATA THEORY

Warren Darcy, Oberlin College Conservatory of Music, Chair

#### Single-Movement Form, Multi-Movement Cycle, and the Double-Tonic Complex in Strauss's *Don Juan* Steven Vande Moortele, McGill University

In a groundbreaking essay from 1992, James Hepokoski interpreted the form of Richard Strauss's tone poem *Don Juan* as "a process by which what initially appears to unfold as a rondo deformation is conceptually recast, toward the end, as a sonata deformation." This paper challenges Hepokoski's view and offers an alternative reading of *Don Juan* as a "two-dimensional" form that combines an overarching single-movement sonata form with a complete multi-movement symphonic cycle.

Building upon the reservations Hepokoski (2006) has recently voiced concerning his own analysis, I argue that the option of hearing the opening of Don Juan as a rondo is both "generically unavailable" and analytically unconvincing. Rather, an overarching sonata form is firmly in place from the very beginning. At the same time, several apparent anomalies in the course of this sonata form suggest the presence of a multi-movement plan. This is not limited to the slow movement and the scherzo in the developmental space: in addition, the exposition and the beginning of the development of the overarching sonata form suggest a smaller-scale sonata-form "first movement," while the strongly modified recapitulation can simultaneously be heard as a finale. The combination of single-movement and multi-movement plans is, moreover, articulated by the double-tonic complex E major/C major that governs the work's large-scale tonal organization. While C major clearly establishes itself as the tonic of the multi-movement cycle, E major remains the tonic of the overarching form.

## Criteria of "Success" and "Failure" in Mahler's Sonata Recapitulations

Seth Monahan, Eastman School of Music

One of the most powerful concepts in James Hepokoski and Warren Darcy's *Elements of Sonata Theory* is the idea that the eighteenth-century sonata is structured around a set of generic musical *tasks* or *goals*—an image that refashions the genre as kind of a paradigmatic musical plot. This plot hinges on the attainment of two special perfect authentic cadences by the sonata's secondary theme (S): the non-tonic

moment of *essential expositional closure*; and the correlative tonic PAC, the moment of *essential structural closure*, which cinches the recapitulation. The authors' action-oriented view of the genre entails a strong hermeneutic component, since when either load-bearing cadence is not attained, they propose that we hear this as a mode of processive "failure," typically with ramifications on what follows.

This study shows that "recapitulatory failure," as a formal/dramatic category, has tremendous purchase in the interpretation of Mahler's symphonic sonata movements. I show that through the Sixth Symphony, Mahler links expression and formal process with striking regularity: all of his early- or middle-period sonata movements that end affirmatively, in a major key, feature properly functioning recapitulations—those that bring non-tonic expositional material into the tonic (or a "redemptive" coda that amends a failed recapitulation). By contrast, the movements that end tragically, in a minor key, show themselves incapable of such tonal resolution. Just as strikingly, the pattern changes in Mahler's late maturity: I show that from the Seventh Symphony onward, Mahler seems less inclined to dramatize the tonic/non-tonic tensions basic to eighteenth-century sonata rhetoric.

#### **Doubling the Development: Tonal Trajectories in the First Movement of Schubert's String Quartet in G major, D. 887** Anne M. Hyland, King's College, University of Cambridge

Schubert's customary practice of "developing" his sonata-form subjects immediately following their initial statement in the exposition results in two complementary analytical issues. Firstly, his expositions are thereby rendered block-like or sectional in design, and thus anomalous in relation to the more conventional linear expositional trajectory or "rotation" (Hepokoski and Darcy, 2006); and secondly, since the themes have already undergone treatment, the function of the development section becomes ostensibly redundant. While a great deal of analytical attention has been afforded Schubert's discursive expositions—particularly his second-subject groups—it remains that surprisingly little theoretical or analytical research has been carried out on the development sections in his chamber music.

This paper addresses the question of whether Schubert's common-practice techniques of development differ in relation to sonata spaces by analyzing a work in which both the exposition and development sections demonstrate a block-like treatment of the main themes. To this end, I offer a tonal and thematic analysis of the first movement of Schubert's G-major String Quartet, D. 887, foregrounding the techniques employed by Schubert in the development section. As my analysis shall demonstrate, the use of paratactic variation techniques in the exposition is intrinsically opposed to the progressive and stratified nature of the development. Ultimately, by invoking Roland Jordan's and Emma Kafalenos's theory of the "double trajectory" (Roland Jordan and Emma Kafalenos, 1989), I hope to foreground the dual structure implicit in this development's tonal plan, thereby underscoring the relevance of stratification to a theory of Schubertian sonata form.

#### **The Three-Key Trimodular Block in Schubert and Brahms's Sonata Expositions and its Classical Precedents** Graham G. Hunt, University of Texas at Arlington

Sonata-form expositions typically articulate two key areas, with the secondary theme, and the second key area, often announced by what Hepokoski and Darcy (1997, 2006) define as a "medial caesura" (MC). A specialized form arises when two medial caesurae appear in the middle of the exposition: the "trimodular block" (TMB). More unusual still are expositions in which these two medial caesurae articulate *three* key areas, a form I will call the "three-key trimodular block." Franz Schubert utilized this form in several of his sonata-form expositions, and, as James Webster (1977 and 1978) suggests, appears to have influenced Johannes Brahms, who also adopted this unusual phenomenon in some of his early and late compositions. Hepokoski and Darcy's trimodular block idea allows us to critically re-appraise this unusual form (previously discussed as the "three-key exposition" in Schachter 1983, Beach 1994, Graybill 1988 and Kessler 2006) by exploring the pieces' interactions with generic conventions (i.e., compared to traditional two-key expositions employing trimodular blocks and three-key continuous or single-MC expositions). This paper will explore the three-key trimodular block form in works by Schubert and Brahms, as well as its Classical-era precedents in works by Mozart and Beethoven. The tonal structure of the pieces will also be considered in conjunction with the trimodular block. Hepokoski and Darcy's landmark publication *Elements of Sonata Theory* briefly mentions this formal phenomenon but leaves the subject tantalizingly open to further study, which this paper will undertake.

## TIME BENDS

Christopher Hasty, Harvard University, Chair

#### On Crooked Time: Metrical Disruption and Depth in American Roots Music Joti Rockwell, Pomona College

Scholars of American roots music often describe it as "asymmetrical," "heterometric," "crooked," or "hypermetrically irregular," since a wide range of early country, folk, and blues recordings from the 1920s and 30s defies modern conventions of metrical symmetry. This paper presents a model for such asymmetry that takes into account the aural mode of transmission for the repertoire and the fact that performers often do not regard the music as fundamentally asymmetrical. The paper begins by outlining such a model of metrical disruption, which can interact with but is not contingent upon Western notation. It then analyzes excerpts from a variety of roots music recordings, including those of the Carter family, Gid Tanner, Clarence Ashley, and Blind Lemon Jefferson, calling attention to a substantial variety of rhythmic phenomena within the repertoire and highlighting the variation of metrical depth as an aspect of musical process. After examining in detail some of the specific gestural/performative techniques that give rise to the previously outlined types of metrical disruption, this paper concludes with a brief discussion of the ethical and evaluative implications of listening to rhythmic asymmetry.

#### Temporal Segmentation and Prototypical Phrase Categories Mitchell Ohriner, Indiana University

In current cognitive studies of categorization, two models prevail, the classical and the prototypical. In the classical model, objects enter into categories by meeting necessary and sufficient conditions. In the prototypical model, category boundaries are not demarcated; rather, categories are differentiated by their prototypical instances and objects are probabilistically assigned to categories according to shared features. A classical model of phrase structure has prevailed, although many phrases do not fit classical categories.

In a prototypical model of phrase structure, the boundaries of phrase category membership would be undefined and individual phrases would be probabilistically assigned to all categories. The proposed method uses variation in tempo in performance to create a temporal 34

segmentation of a piece, and then probabilistically classifies the piece's phrases in a number of categories according to the variance between an average performance of a phrase and a quadratic interpolation of the timing profile. Examples are drawn from Chopin's *Mazurkas*.

This presentation demonstrates a novel method of describing phrase structure prototypically by prioritizing highly correlative average performances as indicative of a collective understanding of a piece. It is not my intention to minimize the form-generating capabilities of other musical features evident in the score, but rather to emphasize that performers' temporal segmentation constitutes a kind of analysis of those features. By lending credence to those analyses in a categorization of phrase structures, this presentation furthers the shift towards performance as both a wellspring of interpretive knowledge and an avenue of empirical inquiry.

# Musical Meanings in Two Performances of Chopin's Ballade in G Minor, Op. 23

Samuel Ng, University of Cincinnati College-Conservatory of Music

Recent studies on musical meaning have offered new and provocative ways to conceptualize and discuss music. A common assumption between these studies and traditional types of structural analysis is the central position of the musical score in the act of analytical investigation. The reliance on the score as the ultimate source of authority, however, has received much scrutiny from a variety of perspectives, one of which concerns the role of musical performance in the construction of musical meaning. I will illustrate in this paper the relevance of performance to the understanding of musical meaning by studying two recordings of Chopin's Ballade in G minor, op. 23. Performances by Artur Rubinstein (1959) and Krystian Zimerman (1987) show that disparities in tempo. phrasing, articulation, and dynamics may lead to different perceptions of meaning despite the alleged stability of the underlying narrative framework in extant analyses of the Ballade. Specifically, the opposition between Byron Almén's Romance and Tragedy archetypes (2003) captures the difference in the narrative strategy between the two performances. In brief, Rubinstein's performance strongly projects the sense of "victory of order over transgression" of the Romance archetype, while Zimerman's rendition is more aligned with the Tragedy archetype in its portrayal of "defeat of transgression by order." This investigation thus shows that the analysis of musical meaning is profitably informed

by musical performances even in repertories that are habitually analyzed through the score alone.

#### **Evolution of Japanese Text-Setting in Western Musical Style** Noriko Manabe, Princeton University

When Japan adopted Western music in the 1880s, simple translation of European songs proved awkward due to the linguistic differences between Japanese and European languages. In European languages, stress accents, placed on strong beats, define meter. The Japanese language lacks stress accents and is spoken evenly, making meter ambiguous. Furthermore, Japanese contains pitch accents; if the melody veers from their contour, the text is misunderstood. Traditional Japanese song relies on melisma, heterophony, and flexible rhythm, which are often not compatible with Western genres. Hence, the Japanese engaged in a learning process to set texts syllabically in metered music.

This paper outlines the evolution of Japanese songwriting in Western idioms through analyses of the text-music interrelationship and of the theoretical essays of the day. Early translations, such as that for "Auld Lang Syne" (1881), were not sensitive to accent placement, word divisions, or natural speech rhythm; these aspects were improved upon by the Ministry of Education songbooks of 1911–14, written entirely by Japanese composers. In the 1920s, Yamada Kosaku and other composers began to shift meters and follow pitch accents in the melody—both practices reflected in traditional music and poetic recitation. These techniques, particularly the observance of pitch accents, are accepted by composers, popular songwriters, and rappers today, suggesting laws of timing and intonation that are evidently crucial for the comprehension of the Japanese language.

## **HISTORY OF THEORY**

Thomas Christensen, University of Chicago, Chair

#### Rameau's "Art de la basse fondamentale" and Rousseau's *Dictionnaire de musique* Nathan Martin, Columbia University

Under the shelf-mark ms. fr. 230, Geneva's Bibliothèque publique et universitaire preserves two volumes with the collective title: "J.-J. ROUSSEAU | LEÇONS DE MUSIQUE." First mentioned by Jansen (1884) and later examined by Tiersot (1913), the "Leçons" have generally been taken to reflect Rousseau's earliest musical development. But in fact, they are a copy of Jean-Philippe Rameau's "Art de la basse fondamentale," the other known exemplar of which is at the Bibliothèque de l'Institut de France (ms. 2474).

The presence of a manuscript treatise by Rameau amongst Rousseau's papers poses two obvious questions: what, if any, use did Rousseau make of it; and when and how did he acquire it?

In early 1749, Rousseau prepared over 400 articles on music for Diderot and d'Alembert's *Encyclopédie*. In certain respects, the account he gives of Rameau's theory follows the "Art" more closely than the composer's published works. These resemblances, together with an annotation in the manuscript in Rousseau's hand suggest that Rousseau made use of the "Art" in 1749. The most likely scenario is that he received the manuscript from Diderot, to whom Rameau had entrusted it in the late 1740s.

#### A Frenchman in Madrid: Jean-Philippe Rameau's Influence on Speculative Music Theory in Spain Paul Murphy, SUNY Fredonia

It is well known that Jean-Philippe Rameau's musical theories were disseminated throughout much of Europe in large part through the summary edition of his *Traité* (1722) written by Jean Le Rond d'Alembert entitled *Elemens de musique* . . . (1752), and through the German translation of this summary by F. W. Marpurg entitled *Systematische Einleitung* . . . *des Herrn Rameau* (1757). However, little attention has been directed toward the dissemination of Rameau's theories in Spain. This paper traces the influence of Rameau's
speculative music theory through four critical junctures.

The earliest irrefutable evidence of Rameau's influence in Spain is a surprising reference to the Frenchman's Nouveau système (1726) in a margin of Francisco Valls's Mápa armónico-prático (manuscript, Barcelona, c. 1740). Nevertheless, the most complete reproduction of Rameau's theories is found in the little known Spanish edition of D'Alembert's Elemens by Benito Bails, his Elementos de música especulativa (1775). Shortly after Bail's more-or-less complete translation of D'Alembert's summary, Francisco de Santa María published in Madrid his Dialectos músicos (1778) which, like Rameau's original Traité, includes a substantial supplement in which the author demonstrates fluency with some of the most significant ideas presented by these authors in an original and specifically Spanish manner. However, the most critically informed treatment of Rameau's theories was presented to Spanish readers by Antonio Eximeno via his Del origen de la música ... (1796), a Spanish translation by Francisco Antonio Gutierrez of his *Dell'origine della musica* ... written and published in Rome in 1774

## Making Music from Universal Harmony: Influence and Innovation in Kircher's *Musurgia universalis* John Z. McKay, Harvard University

Athanasius Kircher's *Musurgia universalis* (1650) was the most widelydistributed and arguably the most influential music theory treatise of the seventeenth century. Along with Marin Mersenne's *Harmonie universelle* (1636–37), Kircher's text is also one of the largest encyclopedias on music of his generation. Kircher and Mersenne, though coming from different perspectives, interacted with each other and made related contributions to scholarship, including a major theoretical initiative employing the *ars combinatoria* launched by Mersenne and brought to fruition in musical practice by Kircher.

After considering how the contents of Kircher's treatise parallels and then diverges from Mersenne's work, I offer new interpretations of two projects crucial to both treatises—theories of consonance (along with related aspects of contrapuntal theory) and the application of the emerging field of combinatorics to music. Drawing on little-explored passages from Kircher's treatise, my work also draws new connections between theory and practice in his algorithm for generating millions of musical settings automatically. I conclude by proposing a correction to previous scholarship that has branded *Musurgia* as merely a backwardlooking magical and philosophical treatise on the Music of Spheres. Instead, *Musurgia universalis* emerges as a practical guide to musicmaking that contains detailed insights on composition and even codifies these compositional rules in an early mathematical approach to musicwriting.

## Il Cembalo de'colori, e la Musica degli occhi: Newtonian Optics, Venetian Clouds, and Modal Polarity in Early-Eighteenth-Century Music Bella Brover-Lubovsky, Jerusalem Academy of Music / Hebrew University

By common consent, the pairing of the parallel major and minor keys (modal mixture) is acknowledged as a fundamental resource of the mature harmonic tonality that acquired its primary syntactic role and formal importance only in the late eighteenth century. I aim to disprove this view by showing that it was extensively employed by the North-Italian composers already at the turn of the century and by viewing their use of modal polarity through the lens of contemporaneous scientific theories and artistic practices.

I analyze the rhetorical and grammatical aspects of binary oppositions and modal transportability in the music of the early eighteenth-century Venetian composers (Vivaldi, Marcello, Albinoni, Caldara). Their innovatory treatment of modal mixture corresponds with the simultaneously emerging aesthetics and pictorial imagery of clouds and the new *chiaroscuro* techniques in Venetian art (Tiepolo, Ricci, Pittoni, Guardi). I suggest a semantic approach to modal mixture through the lens of "Venetian" clouds—with their morphological function of reflecting light and a local reciprocation of colors between objects.

Both devices are further considered through the prism of their contemporaneous optical theories, as stimulated by Newton and advanced by his translators and exegetes in the Veneto (Conti, Rizzetti, Crivelli, Algarotti). The activity of these and other writers coincides with the growing theoretical consciousness of the kinship of major and minor modes. In the 1720–30s the leading North-Italian theorists (Calegari, Vallotti, Riccatti, Tartini) discuss the issues of consanguinity and symbiosis of major and minor modes.

My aim is to show how the exploration of modal mixture in music perceptively mirrors the all-embracing impact of new scientific theories on the intellectual climate of the Veneto.

## **JE ME SOUVIENS**

Marianne Wheeldon, University of Texas at Austin, Chair

Debussy and the Three Machines of the Proustian Narrative Michael Klein, Temple University

This paper argues that Proust's  $\hat{A}$  la Recherche du temps perdu offers a model of time and memory that can enrich narrative readings of Debussy's instrumental music. Much research views Proust's themes as akin to leitmotifs (Nattiez's Proust as Musician). But Steven Kern (The *Culture of Time and Space*) has argued that time and memory in Proust were part of a larger cultural reaction against the authority of public time established in the late nineteenth century. À la Recherche, then, becomes a narrative archetype for the expression of private time, rather than a literary expression of musical structures. The Proustian narrative begins with involuntary memory, acting as a temporal metaphor (Kristeva, Proust and the Sense of Time). From the involuntary memory, a cognitive effort enlarges the past until it is regained. But, because the enriched past fulfills its ecstatic potential at the end of his life. Marcel feels a sense of regret that he will not live long enough to record his impressions. Gilles Deleuze (Proust and Signs) has configured this trajectory as the "three machines of the Search." Those machines are memory, eternity, and crisis. The Proustian narrative, then, moves through ever enlarged and altered memories, leading to an ecstatic realization of time's fullness, followed by a period of regret.

In Debussy's instrumental music, the Proustian narrative involves transformation of a recurring motive, leading to climax or apotheosis, often in the wrong key, followed by musical signifiers for loss. This paper traces this narrative through *Reflets dans l'eau*, and the first movement of the Cello Sonata. The paper concludes with a brief discussion of the end of temporality in the twentieth century (after Frederic Jameson).

## Aspects of Post-Classical Cadential Design in Fauré's *Mirages* Clare Sher Ling Eng, Yale University

Cadences written after the common practice period are consistently discussed with reference to the traditional authentic/plagal/deceptive taxonomy, even when they bear few features that would encourage an interpretation in those terms. This practice minimizes features not found in classical formulae and also flattens out post-classical cadences by according them a uniformly vague degree of imperfect closure. This paper suggests an alternative approach by exploring the role of motivic connection and outer-voice intervals in forging a network of cadential relationships in a late song cycle of Fauré. Repeated analytic "passes" are made at the final cadence of *Mirages*, and each time, the context within which closure is read is enlarged, resulting in a series of modifications to the initial interpretation of that close. Ultimately, the final cadence is related back to the opening phrase of the song cycle and shown as the culmination and resolution of tensions seeded in the first song. By considering the recollection of two motives introduced in the opening phrase of the first song, as well as the progression of outer-voice intervals at various cadences, the analysis invites a form of tonal listening that unfolds over the course of the entire song cycle. It is also a prototype of how post-classical cadences can be read in a way that facilitates a nuanced appreciation of their contextual significance.

## Chromaticism, Motive, and Tonality in Bizet's *Carmen* Andrew Pau, The Graduate Center, CUNY

Susan McClary noted in 1994 that "theorists rarely bother with *Carmen*," presumably because they find Bizet's music too easy. In this paper, I test McClary's hypothesis by examining the Séguedille and Duo from Act I of *Carmen*. I conclude that Bizet's use of chromaticism, motive, and tonality in *Carmen* is richly inventive and deserving of further analytical attention.

The analysis focuses on a chromatic motive that has two dualistic harmonic forms. The motive occurs at numerous points of dramatic significance in *Carmen*, including Carmen's entrance, the Habanera, the "Flower Song," and the final scene. Accordingly, it forms an essential element of the opera's *tinta musicale*. The paper will examine how this chromatic motive influences harmonic motion within the Séguedille and Duo. It will also explore how Bizet uses commontone and third-related harmonies within a larger framework of "motivic tonality."

The paper argues that Bizet and *Carmen* deserve the same kind of attention from theorists that William Rothstein has advocated for Italian opera. It is time for theorists to take up the challenge issued by McClary to "use our analytical training to interrogate how Bizet 'did things with notes." In doing so, we stand to gain a better understanding of chromatic practice in nineteenth-century music.

## Memory and Melancholy in the "Epilogue" of Ravel's Valses nobles et sentimentales Michael Puri, University of Virginia

When conceived as the presence of the past, memory can be said to pervade the music of Maurice Ravel. At first glance, the number and range of these acts of musical memory—in pieces modeled on the Medieval ballade, the Renaissance chanson, the Baroque tombeau, the Classical sonatina, and the Romantic poem, among others-would seem to testify to a smooth relation between past and present. Upon closer review, however, this relation is more problematic than it first appeared. One of the most complex and captivating artistic testaments to what Andreas Huyssen has called "twilit memory"-not only in Ravel's music, but in Western modernism as a whole-is the eighth and final waltz of his piano suite Valses nobles et sentimentales (1911). In this waltz, which Ravel entitled "Epilogue," the hope of making the past present is reborn with each of its numerous thematic recollections, only to be dashed repeatedly by the melancholy knowledge of its impossibility. In the course of analyzing the Epilogue, we explore affinities between its musical behaviors and philosophical accounts of memory by Henri Bergson, Vladimir Jankélévitch, and Pierre Nora, while also relating it to other memory pieces by Robert Schumann and Claude Debussy.

## **PROBLEMS OF HARMONY**

Daniel Harrison, Yale University, Chair

## **Absent Tonics in Pop and Rock Songs**

Mark Spicer, Hunter College and the Graduate Center, CUNY

Walter Everett has recently confirmed that non-tonic openings have been quite prevalent in pop and rock songs since at least the 1960s. As Everett aptly puts it, "these songs all find their tonics eventually, with a rush of familiarity that often seems like the dissipation of clouds." In certain extreme cases, however, the promised tonic chord *never* actually materializes. I argue that in order to make a claim for a song as having an absent tonic, there must be enough information in the song's chord progressions and melodies for us to discern the tonic when heard against the backdrop of a "default" major or minor (or, if you prefer, Ionian or Aeolian) system. The tonic chord may well be initially absent only to emerge later in the song (as in Prince's "Little Red Corvette"), or else

never materialize (as in the Spinners' "I'll Be Around"). In many such instances, these songs tell a story of a romantic relationship gone bad, in which case the absent tonic may be interpreted as a powerful metaphor for lost love. This paper will offer analyses of songs with absent tonics across a wide range of popular styles, from Philadelphia soul to alternative rock to synth pop.

## The "Content and Flavor" of Philip Glass's Harmonic Cycles Evan Jones, Florida State University

Notwithstanding the worldwide fascination with the music of Philip Glass, analytical study of his output remains fairly limited in comparison with that of his fellow American minimalists. Published analyses focus disproportionately on his early period (up to 1976, the year of *Einstein* on the Beach), and commentaries on Glass's music since Einstein largely eschew analytical interrogation of what may be termed his mature style. Glass identifies this new stylistic phase as beginning with Another Look at Harmony from 1975, citing an interest in "new solutions to problems of harmonic usage, where the evolution of material can become the basis of an overall formal structure intrinsic to the music itself (and without the harmonic language giving up its moment-to-moment content and 'flavor')." In this paper, I propose to explore aspects of the "content and flavor" of Glass's harmonic language from the mid-1970s through the late 1980s, in hopes of revealing something of the "new solutions" that Glass was seeking during this period. Following a defined set of strictures, Glass's chromatic textures are inscribed on a diatonic lattice, a cylindrical structure that highlights the enharmonic reinterpretation of chromatic elements. As shown on the lattice, many of Glass's characteristically oblique chordal successions accomplish diatonic drift. suggesting a continuing migration into multiple sharps or multiple flats as his harmonic cycles repeat. Achieving a deeper understanding of Glass's mature harmonic language will, I hope, enhance an appreciation of his inventiveness in this domain and stimulate study of other composers' post-tonal triadic practices.

#### **Telescoped Harmonies and Functional Collisions in Baroque Contrapuntal Music: Three Types of Ambiguity** Bruno Gingras, Goldsmiths College, University of London

The publication of Daniel Harrison's Harmonic Function in Chromatic *Music* spurred a renewed interest in the analysis of harmonically ambiguous passages in late nineteenth-century music. However, little scholarly attention has been devoted to equally intriguing passages written more than a century earlier. Yet Baroque polyphony, and especially the music of J.S. Bach, is rife with telescoped harmonies and assorted functional collisions. Drawing on analytical methods introduced by Harrison and further developed by Kevin Swinden and Deborah Rifkin, I propose a taxonomy of ambiguous simultaneities in Baroque music, ordered according to their level of complexity in the manner of William Empson's typology of literary ambiguities. Through the analysis of excerpts of keyboard music from Bach, Handel, and Couperin, this paper describes commonalities and differences among three types of ambiguity identified as "functional anticipation," "functional collision," and "functional juxtaposition." Motivic repetition is established as a prerequisite to the emergence of such ambiguities, which are often generated by a conflict between the "functional identity" of the motive and the harmonic context implied by concurrent voices. The paper concludes with a reflection on the aesthetic role of these ambiguities in Baroque contrapuntal music.

## Sacred Harp Harmony: A Part-Writing Primer for Shape-Note Hymnody Robert T. Kelley, Lander University

When asked to list the uniquely American genres of music, most people would include jazz, gospel, rock, and perhaps a few others. There is, however, an older musical tradition than these that is quintessentially American in its origin, philosophy, style, and usage, and that is thriving today all over the country. Although it evolved from a British singingschool tradition, the American tradition of shape-note singing, often referred to as Sacred Harp (after the best-known shape-note tunebook) or simply fasola, rejected the style of most European music in favor of the rugged unrefined sounds of the composers of the First New-England School led by William Billings. While some musicological and ethnomusicological studies and several composers' works based on shape-note music have given this music and its singing tradition some exposure among trained musicians, music scholars have still not fully addressed the sound and style of this music. Some scholars, such as Charles Seeger (1940), have described the style by enumerating the partwriting procedures violated by most works in the tradition. Dorothy Horn (1958) has likened this folk-influenced style to Yasser's (1932) Theory of Evolving Tonality, where pentatonic folk tunes require treatment in quartal harmony. This study addresses the harmonic language of shapenote hymnody from a music theorist's perspective, culminating in a general composition procedure for writing in the style of the Sacred Harp.

Friday afternoon, 30 October

# FORM AS PROCESS: CELEBRATING THE WORK OF JANET SCHMALFELDT

Brenda Ravenscroft (Queen's University, Kingston) - Session Chair

## Sponsored by the Committee on the Status of Women

## Becoming at a Deeper Level: Divisional Overlap in Sonata Forms from the Late Nineteenth Century Carissa Reddick, University of Oklahoma

The concept of form as "becoming," as proposed by Janet Schmalfeldt in her article "Form as the Process of Becoming: The Beethoven-Hegelian Tradition and the 'Tempest' Sonata," is related to the concept of *functional overlap*, in which the function of a given segment extends into a neighboring segment. This phenomenon occurs in classical movements, as in the first movement of Haydn's String Quartet, op. 33 no. 1 (H. III:37), in the first movement of Beethoven's "Tempest" Sonata (as explored in Schmalfeldt's article), and in sonata-form movements from the late nineteenth century. These later movements contain overlap not only between adjacent segments (primary theme, transition, etc.) within the larger divisions, but also between the larger divisions themselves (exposition, development, etc.).

This paper explores divisional functional overlap between the development and recapitulation, with particular focus on two of its manifestations: 1) overlap between the retransition and the recapitulation, and 2) Hepokoski & Darcy's so-called "expanded Type 1" sonata, in which the recapitulation gives way to, or *becomes*, the

development. When viewed through Schmalfeldt's processual lens, the expanded Type 1 format used by the late nineteenth-century composers becomes deeply rooted in the Romantic style. The use of such a format and other types of deeper-level functional overlap by composers in the late nineteenth century reflects their continuation of Beethoven's interpretation of sonata form as a process of the interaction between motivic material and formal function.

## A Response to Schmalfeldt's "Form as Process of Becoming": Once More on the Performance and Analysis of Schubert's Sonata in A minor, Op. 42

Mike Lee, Cornell University

This paper addresses Schmalfeldt's research on form as "process of becoming" in early nineteenth-century music, and posits potential modes of performance that would more directly articulate the particular formal unfolding of Schubert's A minor piano sonata, op. 42.

My conception of form as "process of becoming" for op. 42 is grounded in the tension between content and the form that pervades the movement. I argue that when the latent musical tendency of a material is at odds with the normative prescriptions of its immediate formal context, we perceive two complementary formal "processes of becoming" occurring at once: 1) the harmonic/motivic processes of the materials transforming the normative functional associations of its immediate formal context, and 2) the functional requirements of the formal unit molding the materials to serve formal functions beyond its most innate proclivity.

As will be shown, two separate musical narratives that project differing metric profiles unfold against the sonata-form backdrop. Once the possibility opens up for the two musical narratives to oscillate between 2/2 and 4/4 meters, the tempo heading *moderato* as applied to these two alternating meters yields a different sense of tempi for each of the narratives. Drawing on late eighteenth-century tempo/meter conventions, the reconceived tempo relations foreground the palpable network of formal processes of becoming that otherwise remain dormant via a conventional performance that maintains a steady quarter note pulse throughout.

### Beethoven's "Tempest" Exposition: A Springboard for Form-Functional Considerations William E. Caplin, McGill University

Any new form-functional interpretation of the first movement of Beethoven's "Tempest" Sonata must begin in response to Janet Schmalfeldt's masterful account, which focuses largely on how formal units within the piece exhibit a "process of becoming." Though her analytical readings are thorough and convincing in most details, the first movement of the "Tempest" is, nonetheless, sufficiently intricate as to provide a springboard for further considerations of various formfunctional issues. This presentation investigates four aspects of the exposition section stimulated by Schmalfeldt's interpretations: the problem of the main theme in relation to a possible introduction and the subsequent transition; the functionally ambiguous status of the "standing on the dominant" in the new key; the functional significance of the invertible counterpoint in mm. 55–68; and the problem of determining a final cadence for the exposition and the resulting confusion between cadential and post-cadential functions.

In the course of her analysis, Schmalfeldt identifies three moments of retrospective reinterpretation: an opening (slow) introduction "becomes" the main theme (mm. 1–21); a main theme "becomes" the transition (mm. 21–41); and codettas following the first subordinate theme "become" the opening of a second subordinate theme (mm. 63–68). I take issue with each of these readings, and, moreover, propose two cases of retrospective reinterpretation that she does not identify: a post-cadential standing on the dominant of a transition "becoming" an initiating unit of the first subordinate theme (mm. 42–49); and a series of cadential evasions within the second subordinate theme "becoming" a post-cadential closing section. That our interpretations of these critical formal junctions of the exposition diverge—despite our working from the same basic theoretical premises—bears witness to the endlessly fascinating complexities offered by the "Tempest" Sonata.

## Formal Process, Sonata Theory, and the First Movement of Beethoven's "Tempest" Sonata James Hepokoski, Yale University

In recent decades much musicological and analytical attention has been paid to the first movement of Beethoven's Piano Sonata in D Minor, op. 31 no. 2 ("Tempest"). That movement, especially its exposition, has emerged not only as a test case for assessing the merits of differing analytical systems but also—in the wake of Carl Dahlhaus's remarks from the 1980s about its opening pages—as a supposedly revelatory touchstone of the maturing Beethoven's larger aesthetic purposes. As all commentators have noted, startling instabilities are built into both its primary thematic zone (mm. 1–21) and the onset and continuation of its transition (mm. 21ff.). While one should not downplay such features, it has been tempting to overread them, even to the point of making strong claims about the emergence here of a new, nonschematic concept of form as "the [Hegelian] process of coming into existence," a "processual character of musical form," (in Dahlhaus and, in a sophisticated, expanded reflection on Dahlhaus's position, Janet Schmalfeldt).

To be sure, there are "form-as-process" aspects to be observed in this exposition. Still, this is not the analytical perspective that would be singled out from the standpoint of dialogic form, which would instead examine Beethoven's striking expositional choices as creative decisions that entered self-consciously into a tense dialogue with a broad array of normative and less-normative compositional options available to him at the time. From this perspective, the seemingly unusual features of the exposition's onset can also be grasped as heightened, dramatic stylizations of options already built into the sonata system of the period. While this viewpoint by no means normalizes this extraordinary exposition, it does suggest a mode of reading it that counterbalances those that have focused more attention on its innovative ("new-path"), process-oriented features.

## One More Time on Beethoven's "Tempest," From Analytic and Performance Perspectives Janet Schmalfeldt, Tufts University

Processual approaches to the perception of multiple musical dimensions—motive, rhythm, harmony, cyclic designs, and, most recently, hypermeter—can claim venerable antecedents in music analysis. Such approaches ask us to listen both "backward" and "forward," as recommended by the post-Hegelian Theodor W. Adorno. Following Adorno's path, Carl Dahlhaus has become the most influential proponent of processual approaches to *form*; but his single-minded preoccupation with just one passage—the opening of Beethoven's "Tempest" Sonata—has come to be regarded by some as limited in scope, if not overblown. In my 1995 critique of Dahlhaus's ideas about

the "Tempest," I placed his views within the historical context of a "Beethoven-Hegelian" tradition; I strove to emphasize that, with or without the summoning of Hegelian ideology, there is much to be gained from the technique of retrospective formal reinterpretation in European music. I addressed the interplay of well-established formal conventions and their transformations, while hoping to recapture, if ever so tenuously, the processual nature of the musical experience for both listeners and performers. I am pleased to note that, since then, the procedure of retrospective reinterpretation has been implemented by others, and most especially by William E. Caplin, in his Classical Form (1998). To return with him and with James Hepokoski to the initial site of Dahlhaus's argument affords the opportunity to reexamine the "Tempest," this time primarily, but not exclusively, from the perspective of a performer whose experience with the sonata has undoubtedly influenced her analysis. In his forthcoming essay on the "Tempest," Caplin suggests that alternative pianistic treatments of the passages he addresses may be chosen to elicit alternative intuitions about their form-functional roles. I shall act upon Caplin's suggestion by offering my own and recorded renditions of individual passages to convey different formal interpretations-Caplin's, Hepokoski's, and mine.

## TONE AND MEANING IN EARLY MUSIC

Jennifer Bain, Dalhousie University, Chair

## Structural Implications of Isorhythmic Design in Guillaume de Machaut's Motets

Jared C. Hartt, Oberlin College Conservatory of Music

In this paper, I examine the various ways Machaut organizes the tenors of his twenty isorhythmic motets, and in turn speculate about why two tenors in particular exhibit unusual structures. By drawing on Alice Clark's observation that Machaut likely exhibited some compositional freedom with his tenors—that is, the tenors as they appear in the motets are likely not always exact quotations from the chant repertory—I propose potential reasons why Machaut may have altered his source melodies.

A tenor's final pitch, even when not perceived in advance as a goal, is nonetheless always perceived as an especially salient point of articulation. Each of Machaut's liturgical tenors concludes with a descending step, and each is in turn counterpointed with a specific type of voice leading that affords the possibility for providing significant emphasis to the last sonority of a motet. Accordingly, I ask whether Machaut organizes his tenors in a way that allows for other such strong progressions, taking care to note mensural placement and the relative duration of surrounding tenor pitches. By applying this apparatus to the unique tenor structures of Motets 3 and 6, and by comparing these two melodies with hypothetical tenor segmentations, I seek to shed further light upon Machaut's compositional process.

### Concerning Gendered Discourse in Medieval Music Theory: Was the Semitone "Gendered Feminine?" Sarah Fuller, Stony Brook University

In her award-winning article "Gendering the Semitone, Sexing the Leading Tone," Elizabeth Eva Leach announces that music theorists of the Middle Ages considered the interval of the semitone to be associated with femininity and to be in substantial degree lascivious (*MTS* 28/1 [2006]: 1-21). This paper contests that idea, along with her claim that "directed progressions" in fourteenth-century music were considered to be metaphors for sexual desire and hence morally suspect. The counter evidence consists of passages from a broad range of medieval and early Renaissance music treatises whose authors describe semitones, pitches outside the official gamut, and other related phenomena in language that cannot be construed to carry gender implications. This investigation has implications for how historians of music theory reconstruct collective attitudes from past epochs and for the collection and interpretation of supporting evidence critical to such projects.

## A Preliminary Inquiry into Sixteenth-Century "Modality" in Selected Works by Josquin Kyle Adams, Indiana University

This paper represents the first step in an attempt to revitalize the term "modality" to describe how mode can operate at a deep level of structure in sixteenth-century music. I will show how this deeper level can be illuminated through use of the "imaginary cantus firmus," a quasi-Schenkerian hypothetical bass line that provides consonant support for all voices in a polyphonic texture.

After justifying the use of the imaginary cantus firmus with reference to other conceptions of mode, both from the sixteenth century and the present day, the paper will begin by outlining the criteria used to extract the imaginary cantus firmus from the musical surface. I will then use the technique to analyze selected works by Josquin, and to show that imaginary cantus firmus analyses can lead to more definite modal classifications than were previously possible for sixteenth-century polyphonic works. I will propose that further application of this technique could lead to a more thorough understanding of the style formerly known as "modal."

## "In Their Own Native Keys": Tonal Organization in William Byrd's Published Motets Mark Yeary, University of Chicago

William Byrd's three published motet collections (1575, 1589, 1591) offer a tantalizing point of entry to the study of Byrd's harmonic practice: while Byrd grouped many of his motets according to their final bass pitches, it is unclear what these groupings reveal about his concepts of tonal organization. Though ordering by final is a hallmark of continental motet publications, recent scholarship has argued that modal systems held little influence among English composers and theorists; and though analysis of Byrd's practice may reveal "tonal" elements, concepts resembling major/minor tonality do not appear until well after Byrd's time.

I propose "triadic key" as a means to understand the specifically non-modal aspects of Byrd's tonal organization. The concept of triadic key is developed from the treatises of English theorists Thomas Morley and Thomas Campion, both of whom refer to the bass voice as the "key" and primary marker of tonal organization; Campion's treatise in particular identifies a piece's "key" as the lower note of a prominently outlined bass fifth. In addition to identifying a common form of pitch organization within Byrd's notably "tonal" motets, triadic key provides an emic means of reconciling this practice with his grouping of motets. Triadic key permits the possibility of modal influences while highlighting the specifically "tonal" elements of Byrd's motets, and it may be used to assess the presence of similar tonal organization in other works of Byrd and his contemporaries.

## **GROOVES AND CLIMAXES**

Ellie M. Hisama, Columbia University, Chair

## Meter as Process in Pop Song Introductions: Groove Buildups, Level Shifts, and a few "Bad Girls" Robin Attas, University of British Columbia

The groove, a collection of repeated riffs that form the backbone of many popular music songs, holds great potential for music theoretical study. Recent studies of groove-based popular music (Hughes 2003 & 2008, Spicer 2004, Butler 2006) have focused on general elements of the groove's repetition and metric profile in particular repertoires. But theoretical details of the groove's metric make-up remain under-examined.

The groove is established by adding elements over the course of the introduction in a process that I call a buildup. This linear, goaldirected process cumulates in the entry of the lead vocalist for the first verse. Such buildups can be basic (only two distinct versions of the groove before the vocal entry) or extended (more than two versions prior to the vocal entry).

Through use of the analytical techniques developed by Christopher Hasty, where meter is seen as a process rather than a fixed grid, I will examine a variety of introductions that use the buildup technique to form a groove. This will demonstrate not only the importance of musical detail in the formation of meter at the beginning of a pop song, but also help us to recognize the rich variety in what have traditionally been considered unremarkable repetitive figures in all sorts of music.

## Rhythm Necklace and Hemiola: Hidden Meter in Radiohead and Björk

Stephen Taylor, University of Illinois at Urbana-Champaign

A striking metric illusion links two recent songs, "Pyramid Song" (2001) by Radiohead, and "Desired Constellation" (2004) by Björk. Both remain metrically ambiguous until about halfway through—then an underlying, hidden meter is revealed which dramatically changes the way listeners hear the music. The surface rhythms in each song are related in different ways to their underlying meters, making two contrasting kinds of polymeter: rhythm necklaces (sets of onsets which can be rotated to begin at different "downbeats," analogous to the modal rotations of the

diatonic scale) and hemiolas. Both of these are shown as superimposed polygons on circular lattices. Transcriptions and re-compositions of each song—including multiple interpretations of metrically ambiguous excerpts—show how melody, harmony, form, and rhythm contribute to the songs' metrical impact. Other topics discussed include the "Erdösdeep" property of some rhythms and scales; thoughts on hemiola and figure/ground illusion; and links between representations of musical scales and rhythm.

## Subverting the Verse/Chorus Paradigm: Terminally-Climactic Form in Recent Rock Music Brad Osborn, University of Washington

Studies of song form in mainstream rock music have often assumed what I call the "verse/chorus paradigm." From this perspective, the chorus is regarded as the selling point, and the song's form consists of chorus repetitions framed by contrasting verses, sometimes including transitional sections such as pre-chorus and bridge. This chorus-asselling-point argument is validated by the treatment of rock songs in commodity culture, whereby songs are often advertised using clips of their chorus alone.

Recently there has been a growing movement in rock music, especially in less commercially-oriented rock subgenres, to subvert the chorus-as-selling-point trend. Using a design I call "Terminally-Climactic Form," such artists either downplay the role of the chorus or remove it altogether, opting instead for a single climactic section of new musical material at the end of the song. Terminal climaxes often appear as culminations of several processes, such as tonal function (e.g., a modulation to the relative major), dynamics (e.g., a large scale crescendo), or melodic function (e.g., reaching a memorable "hook"). In this presentation, I present three broad archetypes for Terminally-Climactic Form: two-part, three-part, and through-composed, and provide analyzed examples of each.

## CARTER 101

Guy Capuzzo, University of North Carolina-Greensboro, Chair

### An Imagined Drama of Competitive Opposition in Carter's Scrivo in Vento Joshua B. Mailman, Eastman School of Music

Carter's music poses struggles of opposition, for instance in timbre (in the *Double Concerto*), space (in the Third Quartet), or pulse (in the Fifth Quartet). His preference for the all-interval tetrachords is also well known. From these facets of Carter's music, I develop a narrative interpretation of his Petrarch sonnet inspired solo flute piece: *Scrivo in Vento*. Specifically, I forge narrative paths, imagining the two tetrachords as active agents opposed in competition.

*Scrivo* analyses by Capuzzo and Childs stress continuity via Qtransforms and common-tone voice leading between tetrachords. Instead, my analysis emphasizes oppositional struggle by tracing the tetrachords as distinct entities that cooperate and conflict as they maneuver to outdo each other.

The analysis advances three agendas. First: It focuses hearing and reading *Scrivo* on Carter's concern for the aesthetics of oppositional struggle, his choice of a sonnet as inspiration, and his affinity for the allinterval tetrachords. Second: It shows how analytic detail can be organized into narratives by (a) projecting dramatic roles onto categories asserted by a formal theory and (b) treating the formal theory's relations metaphorically as actions performed by each role. Third: It shows that detailed pc set analysis can support a Heraclitean view of music: a flux of opposing forces seeking and resisting unity.

### A Transformational Approach to Harmony and Voice Leading in Elliott Carter's Recent Music Jason Hooper, University of Massachusetts Amherst

Elliott Carter's recent harmonic practice has often been characterized as an effort to achieve maximum variety within the confines of a limited harmonic vocabulary. In the preface to his *Harmony Book* (2002), Carter remarks, "From about 1990, I have reduced my vocabulary of chords more and more to the 6-note chord no. 35 and the 4-note chords nos. 18

and 23, which encompass all the intervals." The six-note chord no. 35 is better known as the all-trichord hexachord (012478)—a hexachord that embeds all twelve of the trichordal set classes. The four-note chords nos. 18 and 23 are better known as the all-interval tetrachords (0146) and (0137) respectively. Given Carter's relatively limited set-class vocabulary, this paper suggests ways that transformational techniques are able to model the dynamism of Carter's recent harmonic practice. Compositional spaces generated by the complement-union property (CUP) are reconfigured to create Tonnetze. Contextual transformations are then defined on these spaces. A geometric space that models transformations among all-interval tetrachords is explored in detail. The paper concludes by proposing a space to model transformations among all-trichord hexachords. Carter's works under consideration include Scrivo in Vento for solo flute (1991), Shard for solo guitar (1997), Two Diversions for solo piano (1999), and Fratribute for solo piano (2008), among others.

## Elliott Carter and the Sorcerer's Stone: All-Interval Tetrachords as Musical Building Blocks Michael Buchler and Alan Theisen, Florida State University

The two all-interval tetrachords (AITs), though asymmetrical, harbor rather curious combinatorial potential: when two such tetrachords are combined, they invariably form symmetrical sets that highly project specific interval classes. This talk will examine the relationship between AITs and well-known symmetrical collections (particularly the octatonic) and will reveal some ways in which Elliott Carter has realized their combinations. Furthermore, we will demonstrate how understanding the interaction between small- and large-sized harmonic building blocks can help one aurally navigate Carter's musical forms. Analytical examples will be drawn from *Esprit Rude/Esprit Doux* (1984), String Quartet No. 5 (1995), and *Dialogues* (2003).

## Maximizing the Miniature: Signature Chords and Covert Means in Elliott Carter's Latest Music Patrick Budelier, Illinois Wesleyan University

Many musicians are familiar with the principal harmonic signatures of Elliott Carter's recent music. Carter himself has openly declared that starting around 1990, he progressively refined his encyclopedic harmonic vocabulary to focus on the two All-Interval Tetrachords (AITs) and the All-Trichord Hexachord (ATH). This decision has evidently served him well: he has developed a concise and limpid "latest" style, which since 1993 is represented by over sixty new compositions. Brief miniatures, many of them solos, comprise nearly half of this output.

In a series of analytic vignettes from *Retrouvailles* (2000), *Rhapsodic Musings* (2000), and *Figment II: Remembering Mr. Ives* (2001), I investigate the multidimensional intricacies of these ostensibly straightforward miniatures. The analyses explore harmonic and spatial structures involving the AITs and the ATH, "Link" All-Interval Series, and intra-opus "local signature" referential sonorities. The study also reveals Carter's covert (and occasionally humorous) inclusions of his personal musical motto, and offers evidence that he employs precise Golden Section ratios as surrogate long-range structural polyrhythms.

Overall, my presentation advances the idea that brevity and limited harmonic vocabulary notwithstanding, Carter's latest miniatures are profitably viewed not as simplifications, but as intensifications and concentrations of his earlier aesthetic—a maximizing of the miniature.

## SOUNDS OF SADNESS

Parag Chordia, Georgia Institute of Technology Matthew Davis, Ohio State University David Huron, Ohio State University Kelly Jakubowski, Ohio State University Brandon Paul, Ohio State University Olaf Post, Harvard University Alex Rae, Georgia Institute of Technology Laura Tiemann, Ohio State University Gary Yim, Ohio State University

#### Parallels Between Sad Music and Sad Speech

Olaf Post, Gary Yim, Kelly Jakubowski, Brandon Paul, and Laura Tiemann

Linguistic research has established that "sad speech" is characterized by six prosodic cues: (1) quiet voice, (2) slow speaking rate, (3) low pitch, (4) small pitch movement, (5) slurred articulation, and (6) dark timbre. Listeners make use of all six cues in assessing the sad mood state of speakers. In this presentation, we describe a series of analytic studies showing that Western music in the minor mode commonly exhibits these same six features. That is, music in the minor mode tends to exhibit lower dynamic markings, has slower notated and performed tempos, is lower in overall pitch, involves smaller pitch intervals, and shows greater use of slurring and pedaling. In addition, when musical repertoires are compared for similar instruments with darker (marimba) and brighter (xylophone) timbres, there is a marked tendency for the brighter instrument repertoire to favor major-key works. The studies described in this presentation involved large-scale analyses of several musical corpora, including Beethoven piano sonatas, Germanic folksongs, Country and Western songs, twentieth-century percussion music, and random samples of music from the Baroque, Classical, and Romantic periods. In general, these corpora studies show a broad agreement between sadness cues in speech prosody and features in Western music.

#### The Effect of Scale Organization on Perceived Sadness

Gary Yim, David Huron, Parag Chordia, and Matthew Davis

Research in speech prosody suggests that one of the characteristics for detecting sadness is "low pitch." However, if low pitch alone was an important sadness cue, then adult male speakers would sound sad compared with female speakers. An alternative interpretation of the experimental results is that an appropriate sadness cue is "lower compared with normal." For example, when assessing the mood of a friend, we might recognize a saddened state by hearing that our friend's voice is lower than usual. This re-interpretation suggests that *familiarity* might be important when judging pitch-related sadness cues. An experiment is described that tests this interpretation. Listeners were exposed to 15 minutes of unfamiliar melodies presented in concocted "exotic" scale systems. After this familiarization phase, paired listeners then judged the sadness of identical deviant melodies: for one of the listeners, the deviant melody contained randomly selected scale tones that were higher than those heard during the familiarization phase; conversely, a second listener heard the identical deviant melody as containing scale tones lower than those heard during the familiarization phase. The results suggest that "lower than normal" pitches are indeed heard as sadder, independent of the scale system.

### What Emotions do Raags Evoke? An Internet-Based Survey of Listener Responses Parag Chordia and Alex Rae

*Raag* is the basis of Indian music providing a melodic framework for structured improvisation. Raags are thought to elicit certain consistent emotions, with different raags evoking different moods. We describe a Web-based survey in which participants were asked to listen to ten raag excerpts and rate the extent to which each of twelve emotions were evoked by the excerpt. Several excerpts were used as exemplars for each raag; one excerpt was chosen randomly for each listener. A total of 553 listeners participated, making a total 21,377 judgments, where each judgment assigned a score to a particular emotion for a particular raag excerpt. Participants ranged from novices (unfamiliar with North Indian classical music) to expert listeners. A statistical analysis showed that raag was a significant factor in emotion responses (p < .001). Raags Gujari Todi, Marwa, Shree, and Darbari were the most sad, Bimpalasi and Bageshri were in the middle, while Desh, Khamaj, and Yaman were the least sad. Broadly speaking, the degree of sadness of a raag corresponded with the number of flattened scale degrees. The similarities between Indian and European musics notwithstanding, these results are broadly consistent with the hypothesis that pieces with "lower than average" pitches are considered sadder.

## A Theory of Music and Sadness David Huron

Although some philosophers suggest that nominally sad music does not cause listeners to *be* sad, listeners do indeed report sad feelings when listening to certain passages, and these feelings are correlated with physiological changes evident in other sadness-evoking situations. Three factors appear to contribute to sad affect. First, sad music shares acoustic cues in common with sad speech (such as low dynamic level, slow tempo, small melodic intervals, etc.). Apart from these cues, listeners also form learned associations through previous exposure. (A single minor triad can evoke associations with past sound experiences linked to sadness.) Finally, the most common mental activity when listening to sad music is *rumination*: listeners tend to think sad thoughts. It is proposed that sadness cues in music evoke a "sham" psychic pain that causes the release of hormones known to have a consoling or comforting effect. Oscar Wilde (an amateur pianist) aptly described the feeling as follows:

"After playing Chopin, I feel as if I had been weeping over sins that I had never committed, and mourning over tragedies that were not my own." In the absence of true psychic pain, it is suggested that the ensuing physiological changes are experienced as pleasant.

Saturday morning, 31 October

## SOUND UNBOUND

John Covach, University of Rochester and Eastman School of Music, Chair

## Symmetries and Schizophrenic Markers: Progressive Rock's Politics of Experience Kevin Holm-Hudson, University of Kentucky

Advertisements for the British progressive rock band Supertramp's 1974 album *Crime of the Century* asked: "If everyone is mad, who should be committed?" This provocative question summarized the work of British psychologist and activist R. D. Laing (1927-89), whose 1967 bestseller *The Politics of Experience* asserted that schizophrenia was "a special strategy that a person invents in order to live in an unlivable situation."

Laing's influence on the portrayal of "madness" and society in progressive rock has not been closely examined. However, in the same way that Freud's psychoanalysis influenced early-twentieth-century expressionism and atonality, Laing's empathic approach to mental illness and interest in psychedelic experience (arguing for example that inner and outer realms of experience were equally "real" and valid, though both little understood), profoundly influenced the emergence of psychedelia and progressive rock.

Drawing on Laing's writings, and through motivic, harmonic, and formal analysis of three progressive rock songs—King Crimson's "21st Century Schizoid Man," Van der Graaf Generator's "Man-Erg," and Renaissance's "A Trip to the Fair"—that address insanity in society, I shall address the portrayed conflicts between "sanity" and "insanity," "inner" and "outer" experience, that are musically and lyrically expressed as a way of expressing Laing's theories through sound.

#### Fraudulence and the Gift Economy of Contemporary Music Eric Drott, University of Texas at Austin

Central to Stanley Cavell's "Music Discomposed" is the question of fraudulence. Cavell draws attention to the penumbra of doubt that haunts works of contemporary music, the uncertainty that hovers over their claim to the status of art. Cavell's choice of the word "fraudulent" to describe this situation is at once curious and provocative. In everyday parlance, after all, fraud describes not just an act of deception or dissimulation, but one that is undertaken for the material benefit of some individual at the expense of another. But when imposture is passed off as art, what reward does the perpetrator stand to gain? What does the victim stand to lose?

To flesh out the stakes involved in Cavell's notion of fraudulence, this paper reframes the issue in terms of the peculiar economy of contemporary music. As Pierre Bourdieu and other writers on the sociology of art have suggested, the artworld is characterized by its disavowal of the market. Commercial transactions are disguised or renounced, while ostensibly altruistic gifts—of time, money, labor or prestige—are valorized. Two controversies—those involving pianist Joyce Hatto and composer Giacinto Scelsi—indicate why fraudulence represents such a threat to the gift economy of both classical and contemporary music. Not only does it risk undermining the bonds of reciprocity that tie together various members of the new music community, but it also threatens to disclose the self-interested motives that lurk beneath the artworld's façade of disinterestedness.

#### The Sound of the Non-Existent: Music and Adorno's Ontological Strain Stephen Decatur Smith, New York University

In *Negative Dialectics*, Adorno calls dialectics, "the ontology of the wrong state of things." This moment, and many others like it, points to an ontological or phenomenological strain in his philosophy—a register in which, despite Adorno's persistent critiques of Heidegger and Husserl, he casts his philosophy in their terms.

This paper will be concerned with the significance of this ontological/phenomenological strain for an understanding of Adorno's philosophy of music. It hopes that such a reading may locate two benefits for music theory: First, within Adorno's thinking on music, this essay hopes to locate a socially and historically critical phenomenology and ontology of music; second, it proposes that an ontological/ phenomenological reading of Adorno's writings on music also illuminates his often problematical relationship with detailed musical analysis.

The paper proceeds in three parts. First, by tracing Adorno's use of phenomenological, ontological or existential language in a number of his texts, it gives an account of Adorno's philosophy as an "ontology of the wrong state of things." Second, it situates music within this dark ontology, specifically as a utopian moment of rupture in which the nonexistent briefly appears. Third, it concretizes this Adornian critical ontology, and its moments of utopian aesthetic rupture, through a detailed analysis of Schoenberg's "Seraphita" op. 22, no. 1.

## Bruckner & Heavy Metal: From "Chord Power" to "Power Chord"

Don McLean and Sandy Pearlman, McGill University

If Bruckner's orchestra represents the culmination of late nineteenthcentury ambitions for an instrument of power to ecstatically encompass the world, its modern doppelganger, the crypto-orchestra known as the Heavy Metal guitar, represents the consummation of late twentiethcentury ambitions for a technologically-enabled instrument to ecstatically devour the world. How do we move from "chord power" to "power chord"? From "iteration" to "entrainment"? From nineteenthcentury thermodynamics to the systems collapse of the twentieth? Although a number of intriguing cultural overlaps can be posited between the repertoires, this is the first study that identifies various musical-technical and audio-technological means by which Bruckner and Heavy Metal produce convergent impacts upon the listening audience. These include: Ungrund formlessness, timbral and harmonic signaling (tremolandi, gallop figures, fanfares, etc.), manipulation of acoustic decay space, stylistic (and studio effects) looping, and formal wave functions. Examples include: Bruckner's Third (Scherzo), Ninth (Adagio), and Eighth (Finale) Symphonies; and classic Heavy Metal works: Black Sabbath ("Heaven and Hell"), Metallica ("Astronomy"), Blue Oyster Cult ("Frankenstein"), and Slaver ("Raining Blood"). The final part of the presentation instantiates its concepts with the performance of an original fantasy on the finale of Bruckner's Eighth Symphony for virtuoso electric guitar and pedal effects.

## TRAGIC NARRATIVES

Byron Almén, University of Texas at Austin, Chair

## Levels of Nostalgia and Narrative Collapse in the "Pastorale" from Tchaikovsky's Manfred Symphony Joseph Kraus, Florida State University

In his book *Yearning for Yesterday: A Sociology of Nostalgia*, Fred Davis defines three "orders of cognition and emotion" for the nostalgic experience: (1) first order or simple nostalgia, where a superior past is uncritically sentimentalized; (2) second order or reflexive nostalgia, where the authenticity of the nostalgic claim is critically examined; and (3) third order or interpretive nostalgia, where the nostalgic experience is analyzed for its "significance and psychological purpose." Davis claims that the artist can elevate the artwork from the naïve first level by a process called *bracketing*—placing the first-order modality "in quotation marks" and "critically altering its meaning."

My paper will explore Davis's theory in relation to the narrative structure of the "Pastorale" from the Manfred Symphony of Peter Tchaikovsky. Although the movement begins to establish a conventional pastoral narrative, Tchaikovsky problematizes restatements of the principal siciliana theme by introducing greater textural and harmonic complexity, thus bracketing the theme upon its later appearances. The reflexive nostalgia invoked by the second statement is intensified by the subsequent introduction of a problematized "rustic" pastoral (recalling Roman *pifferari* music). The intrusion of hyper-expressive ballet/waltz music in the movement's central section threatens to derail the pastoral narrative altogether; the third and final statements of the siciliana attempt to reinstate the narrative, but are overwhelmed by a return of the hyperexpressive dance music. This narrative collapse (followed by a final reference to the *pifferari*) is a consequence of third-order interpretive nostalgia: the initial experience of the pastoral allowed the listener to escape from a complicated, unpleasant present into a simpler, idealized past, but it is a past that never really existed. Details of harmony, voice leading, and hypermeter will support my narrative reading.

### An Appetite For Patterns: Analyzing Transformation in Horner's *A Beautiful Mind* Score Frank Lehman, Harvard University

The analysis of film music has yet to make use of many of the recent innovations in harmonic theory. Transformation theory, as conceived by Lewin and developed in the past two decades, offers an auspicious toolkit for probing the contemporary film score. The contextual nature of this repertoire, driven by filmic rather than tonal needs, encourages an adoption of a transformational stance. This attitude focuses on changes rather than musical objects, and offers the tool of the graphic network for representation of musical possibilities as they are explored in narrative. James Horner's score to the 2001 film A Beautiful Mind lends itself to this transformational approach. Horner illustrates the mental life of the mathematician John Forbes Nash with wildly chromatic but firmly triadic music-an ideal test-case for Neo-Riemannian analysis. Guided by the composer's analogies with dynamic systems, a transformational analysis of Nash's chromatic complex is offered. The cue "A Kaleidoscope of Mathematics" is the fount of the score's chromatic transformations: it is analyzed in detail to reveal the characteristic moves that represent the workings of Nash's unstable genius. The notion of a "warp" progression—a new transformation that establishes a new harmonic space—is employed to capture the dynamic unfurling of Horner's chromatic arena. Transformational readings are given for music within the film to demonstrate the radically contingent, even game-like nature of Horner's scoring. This approach captures the drift of harmonic contingency well, and with adjustments can align with cinematic chronology. The clarity with which A Beautiful Mind lends itself to this sort of narrative-driven, non-tonal approach may provide a basis for a more general approach to film music analysis-one that does not underestimate the power of harmonic change to steer the interpretation of a scene.

## PHYSICALITIES I

Marian A. Guck, University of Michigan, Chair

## Excavating Lewin's "Phenomenology" Brian Kane, Yale University

David Lewin's "Music Theory, Phenomenology, and Modes of Perception" is a touchstone for phenomenologically influenced music theory. Yet something puzzling remains about the role of perception within Lewin's phenomenology. On the one hand, Lewin argues that perception is itself a type of skill, a "mode of response," acquired over time, which manifests itself in an infinite number of creative responses: playing the piano, sketching an analytical graph, composing a new piece, noodling, et cetera. This places an emphasis on the active, embodied nature of perception. On the other hand, Lewin critiques Husserlian phenomenology, including his own "p-model," for its inability to forge an adequate link between perception and creation. In essence, Lewin argues that phenomenology is still too bound to a passive, disembodied conception of perception.

In this paper, I hope to excavate the ground of Lewin's particular style of phenomenology by: 1) positioning it in relation to the "West Coast" school of American phenomenologists, many of whom Lewin explicitly cites, to demonstrate its role in shaping Lewin's thinking about phenomenology; 2) arguing that a model of perception-as-action was potentially available to Lewin in non-Husserlian strands of the phenomenological tradition, viz.: *existential* phenomenology *à la* Merleau-Ponty, Heidegger, or Gurwitch's phenomenological psychology; 3) suggesting what kind of avenues in phenomenological research could be pursued if one wanted to continue developing Lewin's line of thinking.

#### Theorizing Musical Affect: Arvo Pärt's *Passio* (1982) Arnie Cox, Oberlin College Conservatory of Music

This paper theorizes the role of mimetic motor imagery (MMI) in the generation of musical affect. MMI is imagery related to muscle activity performed in imitation of seen and/or heard actions, and it occurs most often in contexts of observing other humans in real life, athletics, and the performing arts. Occasionally manifesting in overt mimetic behavior, as when we sing along or dance to music, MMI most often remains covert and nonconscious. MMI is a form of physical empathy that contributes a physical feeling to musical experience.

Excerpts from Pärt's *Passio* demonstrate how MMI mediates the relationship between the acoustic fact (objective/structural features) and affective/subjective experience. Rather than looking for affective meaning in the music itself, this approach describes how affect emerges in our embodied engagement with music, motivated and constrained by the acoustic fact in a given context. Among the implications, this approach fleshes out the role of anticipation by characterizing anticipated

events as anticipated *actions*, performed by performers and mimetically performed by listeners. This empirically supported approach offers a systematic way of theorizing musical affect to various degrees of sophistication, from first-year theory courses to professional writing.

## COMPLEXITY AND CONTOUR

Elizabeth West Marvin, Eastman School of Music, Chair

Recasting Medieval Complexity in the Piano Sonata by Peter Maxwell Davies Aleksandra Vojcic, University of Michigan

This paper focuses on the Piano Sonata (1981) by Peter Maxwell Davies, and demonstrates the formal significance of tempo modulation at the level of beat. Overall, rhythmic phenomena in the Scherzo movement reflect a preoccupation with generating complex rhythmic relationships by seemingly simple means—juxtapositions of duple and triple divisions on two levels of beat hierarchy.

Comparative analysis with an Ars subtilior work, Senleches's ballade *En attendant esperance* from Codex Chantilly reveals a similar dichotomy between the apparent complexity of notation, and a rather simpler notion of aiming to achieve emancipated polyphonic lines that can readily stand in contrast and juxtaposition to one another when rhythmically distinct. As a result, in Maxwell Davies's work, extension of the basic principles of mensuration yields the superimposition of different-length tactus beats and asynchronous polyphony gives rise to challenges in perception and kinetic delivery of individually simple sound streams.

Window Algorithms: A Theory of Contour Reduction for Post-Tonal Music Mustafa Bor, University of Alberta

The concept of contour plays a prominent role in the perception of posttonal music; however, most of the analytical tools developed for this repertoire are formally conditioned by the modularity of pitch-class space and do not consider registral characteristics. Taking Robert Morris's work on contour as a starting point, this paper develops a set of contour reduction algorithms, called *window algorithms*, in order to explore musical hierarchies based on contour features. These algorithms involve the notion of a hypothetical window of a specific width through which the contour succession in a given melody is experienced temporally, and they are formally defined with the help of symbolic logic and flowcharts. Based on the successive applications of the algorithms in various combinations, the concept of *contour reduction functions* is introduced. The application of the algorithms is demonstrated on a variety of twentieth-century musical excerpts reflecting a wide range of melodic archetypes, thereby enabling observation of the behavior of the algorithms in different musical contexts.

## BACH

William Renwick, McMaster University, Chair

#### Ritornello Conventions, Formal Ambiguity, and Closure in J. S. Bach's Concertos

Mark Anson-Cartwright, Queens College and The Graduate Center, CUNY

Baroque concerto movements in general, and Bach's in particular, typically conclude with a complete, unmodified ritornello in the tonic. Bach occasionally plays with listeners' expectations about this formal convention in one of the following three ways: (1) by interjecting solo material between the initial and concluding segments of the closing ritornello; (2) by presenting a partial ritornello in the tonic near the end of the movement, as if to feign the closing ritornello, which does not truly occur until later; and (3) by standing on the dominant, as if to imply the imminent onset of the closing ritornello in the tonic, but then digressing in an unexpected way, thus deferring that ritornello. This paper examines the formal motivations for and consequences of these procedures in the music of Bach, with particular reference to BWV 971, 1047, 1050, and 1052.

## **PHYSICALITIES II**

Julian Hook, Indiana University, Chair

## Toward a Theory of Keyboard Topography

Neil Minturn, University of Missouri, and M. Rusty Jones, Butler University

We offer a new means for interpreting pitches, guided by the interaction of keyboard topography and set theory. In binary space, notes are classified as a sequence of white or black keys. In color space, intervallic distances are measured via paths that traverse adjacent black keys or white keys. At the more abstract level of binary space, white/black (W/B) strings are read as binary numbers. A given cardinality of W/B strings generates a dihedral group with associated operations that model transformations in binary space. At the more concrete level of color space, intervals are measured with respect to key color. For example, Db4-to-Eb4 is interval 1 since it moves from one black key to the next adjacent black key. Similarly, B3-to-C4 and C4-to-D4 are both instances of interval 1 since in each case, we move from one white key to the next adjacent white key. In short, keyboard topography elevates our awareness of the symbiotic relationship between performance and analysis. Tactile relationships not appreciated in more traditional analysis lead us to new insights into musical structure. The theory is illustrated in several analytical examples, including the piano music of Bartók.

## The Wheatstone Concertina and Symmetrical Arrangements of Tonal Space

Anna Gawboy, Yale University

Around 1829, the British physicist Charles Wheatstone invented the concertina, a bellows-driven free-reed instrument. Wheatstone designed the fully-chromatic button layout of the standard concertina around a latticed core of diatonic fifth and third cycles, and positioned accidentals on outer rows beside their natural counterparts. In a patent of 1844, Wheatstone proposed several other lattice-design layouts based on equal cyclic octave division to facilitate transposition and playing in remote keys.

My paper explores these symmetrical button layouts as musictheoretical constructs and describes how they interact with bodily reflectional symmetry from a performer's standpoint. Yet, these layouts are also a clue to the concertina's hidden intellectual history, concealed by its widespread reputation as a folk instrument. I show how Wheatstone's designs were inspired by the work of eighteenth-century acoustician Leonid Euler, and how the instrument later became a vehicle for scientific acoustic research in the hands of Alexander Ellis and Robert Bosanquet. I argue that this modest instrument represents a practical manifestation of the acoustic and music-theoretical concerns that also prompted the later, more familiar uses of networked representations of tonal space of the German dualist theorists.

## FORMAL PROCESSES IN SCHNITTKE AND SAARIAHO

Yayoi U. Everett, Emory University, Chair

## Out With the Old and In With the New—or—Out With the New and In With the Old: Voice-Leading Strategies in the First Movement of Alfred Schnittke's Concerto for Choir Bryn Hughes, University of Western Ontario

Some of the most provocative moments in Alfred Schnittke's music are achieved through the jarring juxtaposition of vastly different musical ideas. Schnittke often creates striking effects with a piecemeal compositional language that borrows disparate material from various points in history. On an initial listening, his Concerto for Choir (1984-85) might seem inconsistent with this aesthetic. Each of the four movements sets a poem from the *Book of Lamentations* by tenth-century Armenian poet Gregory of Narek. Throughout the first movement, Schnittke employs diatonicism and common-practice harmonic structures to evoke an "old" tradition. However, several musical details place the movement in a distinctly "new" sound-world. It is through this sense of opposition that Schnittke achieves the musical heterogeneity with which he is typically associated. This paper focuses specifically on the methods that Schnittke employs to create the opposition of "old" and "new" within the harmonic language of the first movement of this work. I create an abstract compositional space that reveals the potential of these techniques within a more confined musical system. Using this as a model, I highlight several moments in which complex manipulations of this system support the notion of opposition present throughout the movement.

## **Oppositions and Metamorphosis: Timbre in Saariaho's** *Château de l'âme* Crystal Peebles, Florida State University

In writing about her works, Kaija Saariaho has emphasized the role of timbre as a structural determinant. She maps certain timbres onto the common opposition between consonance and dissonance, with a stated goal of creating a hierarchy of timbre. Through the lens of this view of timbre and Saariaho's ideas about interpolation, a hierarchy of timbral gestures arises in her *Château de l'âme*, a piece for solo soprano, woman's chorus, and orchestra. Timbre is used not only to define pitch-specific gestures, but to create an overall trajectory of the first movement of this work. Through an interpretive graph that charts the change of timbral consonance through time, this talk explores textual meaning and its interactions with timbre.

Saturday evening, 31 October

## LISTENING THROUGH TIME: PSYCHOLOGICAL AND MUSIC-THEORETICAL PERSPECTIVES ON THE TEMPORAL DYNAMICS OF MUSICAL LISTENING

Johanna Devaney and Michel Vallières, McGill University, Organizers Richard Ashley, Northwestern University Steven Larson, University of Oregon Judith Lochhead, Stony Brook University Stephen McAdams, McGill University Jonathan Wild, McGill University With the participation of the Orpheus Singers of Montréal, the Cecilia String Quartet and D. Andrew Stewart

## Sponsored by the Music Cognition Group

The study of the temporal dynamics of listening is a growing research field that offers an exciting opportunity for collaboration between cognitive psychologists and the increasing number of music theorists interested in perception and cognition. This session begins with a music listening experiment in a concert setting during which we continuously record audience members' responses to the three performed pieces: a vocal piece from the Renaissance, an instrumental piece from the Romantic period, and a contemporary electroacoustic piece. One set of measures involves listeners directly tracking aspects of their emotional response to the music. The other, measured on a different set of listeners, involves psychophysiological recordings thought to capture aspects of emotional response without requiring the listener to be involved cognitively. The concert is followed by a presentation of data on the same pieces from pilot experiments and a panel discussion addressing both the general topic of temporal dynamics of listening from music psychological and music-theoretical perspectives and specifics about the relationship between musical materials and form in the performed pieces and the recorded measurements.

*N.B. This event will take place at McGill University in Tanna Schulich Hall, 527 Sherbrooke Street West* 

## THEORIES AND AESTHETICS: AN HISTORICAL RECONSIDERATION OF SERIALISM AS PRACTICE

Robert Morris, Eastman School of Music, Respondent

### Faux Amis: Cage, Boulez, Adorno

Chris Shultis, University of New Mexico

In the late 1940s, John Cage and Pierre Boulez engaged in a correspondence as they were both working on an almost "Janus-faced" project: each trying to remove the self from their work. The results are well-known: *Structures 1A* by Pierre Boulez and *Music of Changes* by John Cage. Cage, a student of Schoenberg, believed that he and Boulez were working toward a common musical practice; Boulez, a student of Leibowitz, turned on Cage because of his belief that they were not. Nattiez's brief (and also mistaken) attempt to place Boulez in the role of Schoenberg pitted against Stravinsky, made a "straw man" out of Cage just as Adorno did of Stravinsky in his *Philosophie der Neuen Musik*.

This paper examines these misunderstandings in the light of reappraisal and re-evaluation: of how Cage and Boulez's views of each other are wrong but right about something important; of Adorno's being wrong about Schoenberg and Stravinsky but right about something that in fact makes it possible to explain Cage and Boulez. The result is a "dialectical experimentalism" that can shed "little light" on this important moment in the History of Music Theory.

#### **Theories of History: Serialisms in the late 1950s Europe** Irna Priore, University of North Carolina at Greensboro

This paper deals with the problems that the word "serialism" encountered in Europe in the late 1950s. At that time, serialism not only fell out of favor, but the potency of the concept was lost. In 1961, Peter Evans began his keynote address to the Royal Musical Association's 88th session with the following words: "[u]ntil a few years ago, my title ["Compromises with Serialism"] could have stood without any need for further clarification: *serialism*, however mistrustfully it might be received in precept or example, was clearly understood to be that method of pitch relationship devised by Schoenberg" (Evans 1961-62, 1).

This paper addresses the use of serialism by a particular generation of European composers and proposes a fresh discussion on the types of serial practices they adopted. A revisionist history of the term "serialism" will be included to show that serialism was not universally accepted, nor did it have one single meaning, and it was encumbered with confusion. Many diverse (mis)understandings of the serial language, combined with some prejudice from earlier critics, caused composers of the post-war generation to be mislabeled as aleatoric or experimental (or in Evans's terms "unwilling or incapable").

#### Early Serialism in the United States

Richard Hermann, University of New Mexico

Origins for an early serialist period in the US (1930s to early 1960s) are found in Sessions's European sojourn (1925-33), in the flight from fascism of Krenek, Schoenberg, and Stravinsky, and in Dallapiccola's teaching of young American composers in Florence and on his frequent US visits. The earliest significant American writings are Sessions's "Music in Crisis" (1933) on aesthetics and George Perle's "Evolution of the Tone Row: the Twelve-Tone Modal System" (1941) on theory. My technical terminus for early serialism is Martino's "Source Set and Its Aggregate Functions" (1961) and Perle's *Serial Composition and Atonality* (1962). By the end of this period in the US, Darmstadt school avant-gardists had abandoned serialism as *the* overarching metaphor. Americans moved on too: Babbitt to his time-point system and allpartition arrays, Perle to twelve-tone tonality, and Stravinsky to "verticals."

To draw distinctions in American serial practices, I engage critical reactions of and to Myhill (1955), Stadlen (1958), Cone (1960),

and Meyer (1967). To prepare a comparison with serial Darmstadt avantgardists, I examine *Die Reihe*, Boulez (1963/71), and M. J. Grant's 2001 book on their aesthetic positions. Brief musical excerpts from Krenek, Babbitt, Schoenberg, Stravinsky, Perle, Wuorinen, and Martino demonstrate the range of US serialisms. I compare Martino's *Parisonatina al'dodecafonia* (1964) with Berio's *String Quartet* (1956) as representatives of the Darmstadt and Princeton/Columbia schools.

## **Common Practice vs. Intertextual Relation in Late Stravinsky and Wuorinen** Bruce Quaglia, University of Utah

This paper offers an alternate perspective upon the music of composer Charles Wuorinen that questions the efficacy of employing critical identities such as "twelve tone" or "serial" in relation to his music at all. In recent years, Wuorinen himself has abjured the term "serial" when applied to his own music, not only for that word's lack of specificity but also in explicit acknowledgement that the term is now commonly used mostly in a pejorative sense. Instead, he defers to more precise expressions such as "music that is based upon ordered-sets." It is in no way determinative of how the piece is composed in a poetic sense, nor of its immanent structure, much less of the myriad ways in which a listener might choose to interpret such a piece. This deviation may be understood as a specific influence that was exerted by Stravinsky's late music upon Wuorinen.

My discussion will focus upon intertextual relationships between late works of Stravinsky and certain other works by Wuorinen that respond to these. This study is based upon my own sketch studies of both Stravinsky and of Wuorinen. I will foreground aesthetic and compositional differences that open up the possibility of even further intertextual associations.

## THE TEACHING COMPONENT OF THE JOB INTERVIEW

Maureen Carr, Penn State University, Moderator

## Presented by the Professional Development Committee and the Music Theory Pedagogy Interest Group

The session is designed to help graduate students prepare for job interviews by giving them an opportunity to showcase their philosophy of teaching through a twenty-minute demonstration of teaching. Three doctoral students (chosen by a subcommittee consisting of members of the Professional Development Committee and the Pedagogy Interest Group) will present a short lesson on a music theory topic of their choice to a group of volunteer students.

## **Teaching Ternary Forms**

Sara Bakker, Indiana University

Introduction to Species Counterpoint for Beginners

Matthew Steinbron, Louisiana State University

## Introduction to Secondary Dominants in Major Keys

Jennifer Weaver, University of North Texas

A panel of faculty members representing five different types of institutions will provide responses to the teaching demonstrations:

- Ken Stephenson, Professor of Music Theory, University of Oklahoma (a public university with large theory classes)
- Gary S. Karpinski, Professor of Music Theory, University of Massachusetts Amherst (a public university with smaller theory classes)
- Elizabeth West Marvin, Professor of Music Theory, Eastman School of Music (a conservatory)
- Elliott Schwartz, Composer and Professor of Music Emeritus, Bowdoin College (a small liberal arts college)
- Rob Jenkins, Associate Professor of English and Director of the Writers Institute, Georgia Perimeter College (a community college)
# SCHEMATA AND TOPOI

Robert Gjerdingen, Northwestern University, Chair

**Revisiting Schema Theory** Vasili Byros, Indiana University

My paper aims to (re-)consider and (re-)contextualize the place, significance, and potential of schema theory as applied to music of the long eighteenth century, in light of two recent substantial contributions to this area of research: Robert Gjerdingen's Music in the Galant Style (2007) and my own dissertation, "Foundations of Tonality as Situated Cognition, 1730–1830" (Yale, 2009). Furthermore, it is my intention to clarify a great deal of misunderstanding that still surrounds the concept of a schema and its theoretical foundations, as displayed by the question and answer session at last year's "Partimento" panel in Nashville, which perpetuated initial misconceptions first evidenced by reviews of Gjerdingen's A Classic Turn of Phrase (e.g., Cavett-Dunsby 1990; Lester 1990; Agawu 1991). By introducing and contextualizing a large body of empirical evidence-surrounding Beethoven's Eroica Symphony and a particular schema I call the *le-sol-fi-sol*—in a broad and interdisciplinary cognitive-philosophical framework, my paper will (re-) define what precisely constitutes a schema in musical and more general psychological terms, as well as the motivations, objectives, and, more importantly, the applications of schema theory in music and other disciplines. By that means, I shall consider its close association to the recently-developing discipline of empirical musicology (Clarke and Cook 2004), as well as the newly-constructed "interface" of historicallyinformed theory and cognition (Gjerdingen 2007; Byros 2009).

# Parentheses and Loops: On the Perceptual Reality of Phrase Expansions

Danuta Mirka, University of Southampton

In his account of parentheses, William Rothstein (1989) points to the problem of perceptual reality of phrase expansions. As he observes, "cases can arise in which the sensitive listener may hear an expansion, but one in which no prototype or basic phrase is readily apparent" (p. 93). In my paper I distinguish between two types of phrase expansions subsumed by Rothstein under the concept of parenthesis. One of them was discussed by several eighteenth-century authors (Riepel, Kirnberger, Koch). In some of their examples, perception of parentheses is facilitated by changes of dynamics, register, or texture. In all of them, parentheses are separated from the preceding and following course of phrases by caesuras, and hence correspond to parentheses as punctuation mark in speech and recitative (Mattheson, Marpurg). Some other examples of parentheses discussed by Rothstein occur during cadential schemata and create smooth sweeps of music without any caesuras. In my paper I propose to call them *loops*. The amount of surprise caused by a deviation and hence the perceivability of phrase expansion are different at different points of a cadential schema. Although loops are not discussed by composers as means of postponing cadential goals of musical forms.

## (Whose) Performance and (Whose) Analysis: Toward a Pedagogical Approach Peter Kaminsky, University of Connecticut

The title points to a central problem arising in performance and analysis and its pedagogy: how is the analysis by a theorist of a selected work actually going to help a performer to interpret the same or some other work? How is a theorist going to bridge the gap between the inevitable array of graphs, form charts, etc. and the practical concerns of a performer? Within the context of an upper-division undergraduate analysis class for performance majors with a writing-intensive component, my pedagogical approach has as a central activity students' creation of a *performance-analysis narrative*, at first for selected excerpts and short pieces, and finally as a capstone project on their own piece. The narrative comprises three interrelated parts leading to a final stage. Part 1, Analysis, includes the primary structural factors of form, pitch and rhythmic/metric organization, as well as more elusive features of importance to performers such as shape and temporality. Part 2, Expression and Character, combines the analytical results with the performer's intuitions about the quality of expression for the movement. In Part 3, Performance Implications, students synthesize their analytical and characterological findings, and consider how they may be incorporated into an effective performance. The final stage, Assessing Performances, provides a critical assessment of recordings of the piece. The major part of my presentation provides a model performanceanalysis narrative for the opening movement of Mozart's Piano Trio K. 502 (1786).

#### The Influence of Time and Memory Constraints on the Cognition of Hierarchical Tonal Structures Morwaread Farbood, New York University

While there is agreement among theorists that hierarchical structures in music exist, the extent to which listeners perceive them is still under investigation. The goal of this paper is to examine the issue in more detail and offer a perspective that incorporates models of short- and longterm memory. Within this context, it proposes some modifications to Lerdahl's tonal tension model in order to better explain certain experimental data. Data from a recent study on the perception of musical tension was analyzed using regression analysis that takes into account various parameters including harmonic tension, melodic contour, and onset frequency. Descriptions of how these structures change over varying time spans were included in the analysis in an attempt to identify the best predictors of the general tension curve. The results indicated that harmony best fit the data at a time differential significantly longer than the case for any other parameter. This suggests that tonal hierarchies are perceived at a level that goes beyond the typical short-term memory window of three to five seconds

# THEORY AND PRACTICES IN THE TWENTIETH CENTURY

Judy Lochhead, Stony Brook University, Chair

#### Stitching Patterns and the Sketches of Morton Feldman

Meghann Wilhoite, New York City

While surveying Morton Feldman's sketches for his later works (those written from around 1971 until his death in 1987), there came to my attention a significant amount of what I interpret as "labels." The labels are found designating individual notes, chords, measures and systems. Generally, the labels serve the purpose of organizing the sketch material into the order in which it appears in the published score. Less often do the labels function as "shorthand," in which notated material is labeled with, for example, a letter, and thereafter the repetition of the material is signified by that letter and not re-notated.

In this paper I present a picture of Feldman as meticulous rugmaker, as he pieced together what pianist Siegfried Mauser referred to as "an image of discreetly arranged musical sound and form." The sketches present an interesting picture of the composer's organizational methods, and I posit that the labels found in these sketches provide clues as to what types of musical material Feldman considered as constituting a pattern, and how these patterns were stitched together. In addition to this, I posit that a consideration of the look of his manuscripts is pertinent to our understanding of Feldman as a composer.

## Sympathetic Vibrations: György Ligeti's "Cordes à vide" and the Discourses of Theory August Sheehy, University of Chicago

György Ligeti once said, "My compositions defy all attempts to categorize them: they're neither avant-garde, nor traditional, nor tonal, nor atonal. And certainly not postmodern..." While composers' statements on their own work should perhaps always be taken with a grain of salt, we should be wary of dismissing Ligeti's words as mere socio-economic jockeying, for his late music seems to concretize the challenge; hence, recent writers' attempts to make sense of Ligeti's use of musical elements that hearken back to earlier styles.

Rather than trying to understand such restorative gestures as a general response to particular modernist arguments and conditions, this paper asks how one *Étude* for piano, "Cordes à vide," responds to—indeed, resonates with—a panoply of discourses distributed across the history of Western musical thought. What may appear to be a study on the compositional potential of perfect fifths turns out to be something quite different: a demonstration of phenomenological incommensurability between different theoretical concepts often supposed to name the "same thing," e.g., perfect fifth, ic5, or 2:3. I argue that this conclusion gestures towards a way of placing Ligeti's late works in critical dialogue with musical, intellectual, and cultural histories without reducing them to tokens of particular discursive constructs.

## Aligned Cycles in Thomas Adès's Piano Quintet, Op. 20 Philip Stoecker, Hofstra University

This paper focuses on aligned cycles in Thomas Adès's Piano Quintet, op. 20 (2000). An aligned cycle is when two (or more) interval cycles move in the same direction in a note-against-note alignment, e.g., a rising whole-tone scale (an interval 2-cycle) simultaneously with a rising chromatic scale (an interval 1-cycle). Adès's quintet is a singlemovement composition that is cast as sonata form, and three-voice aligned cycles play a significant role in the pitch structure throughout the piece. Every aligned cycle in the quintet is a combination of interval cycles 2, 3, and 4, and though Adès rarely uses any other interval cycles to generate his aligned cycles (i.e., 0, 1, 5, and 6) he constantly changes the registral ordering to generate all six permutations: <2,3,4>, <2,4,3>, <3,2,4>, etc. No matter which permutation Adès uses, he aligns the three interval cycles so that non-functional, major triads—members of setclass [037]—are prominently featured. In addition to discussing how the non-functional major triads of the aligned cycles interact with the sonataform design of the piece, I will also demonstrate how Adès uses threevoice aligned cycles as building blocks that are subjected to rich and intricate processes of transformation.

# Triple Sharps, Qn Relations, and Synthetic Chords in the Works of Nicolai Roslavets

Inessa Bazayev, Louisiana State University

The music of Nicolai Roslavets (1881–1944), long repressed in the Soviet Union, has recently begun to attract the attention of musicologists and theorists. Kholopov 1981, Perle 1981, Ferenc 1993, and Sitsky 1994 are useful accounts of Roslavets's music, but none explains his idiosyncratic orthography. I will show that Roslavets's orthography, which often features such peculiarities as triple sharps, operates on a deeper structure of fifth relations (I show this by Q<sub>n</sub> relations) helping us understand his unique compositional system.

Roslavets uses synthetic chords—groups of scale-like notes recurring at transpositional levels—for instance, those of the sc (0134578) at the start of "Pianissimo"—can be represented by means of quint or perfect-fifth distances (Q<sub>n</sub>), illustrated on a line of fifths. (Octave equivalence, but not enharmonic equivalence, is assumed.) From the resultant transformations emerges a path that not only outlines symmetry but also accounts for the unique spellings of chords: moving to the right on the line produces sharp-dominated spellings, while moving to the left produces flat-dominated spellings.

I classify Roslavets's synthetic chord-paths by three types of symmetry: crisp, nested-crisp, and near-symmetry. I use *Trois Compositions* (1914), "Pianissimo" (1914), and *Cinq Préludes* (1922) to show that  $Q_n$  relations shape the deeper structure of Roslavets's music in a way that explains his unique orthography.

# SONGS AND SEQUENCES

Steve Laitz, Eastman School of Music, Chair

#### **Non-Coinciding Sequences**

Adam Ricci, University of North Carolina at Greensboro

An overlooked phenomenon in tonal music is the pairing of two melodic sequences that have different intervals of transposition, what I term a *non-coinciding sequence* in contradistinction to the more usual *coinciding sequence*. This paper develops a terminology for and typology of non-coinciding sequences and surveys examples of such sequences in art and popular music. Extending Allen Forte's linear-intervallic pattern, which models coinciding sequences, I group non-coinciding sequences by their *configuration*—an ordered list of the harmonic intervals in a non-coinciding sequence, e.g., <10,12|8,10>. Configurations that permute (with certain restrictions) the same set of harmonic intervals belong to a single configuration class. In terms of function, I divide noncoinciding sequences into two broad types: those that are embedded within a coinciding sequence and those that are not. The former constitute a particularly effective type of alteration to coinciding sequences, since such alterations preserve sequential continuation in individual voices. The paper considers excerpts from the music of Rick Astley, Beethoven, Brahms, Chopin, Dvorák, Schubert, Gwen Stefani and Wagner, identifying suggestive connections between non-coinciding sequences and double counterpoint, cadences, and other contrapuntal procedures.

## Sequence as Culmination in the Chamber Music of Brahms Ryan McClelland, University of Toronto

Sequences permeate tonal music. Even in its narrow, and usual, meaning that refers to coordinated melodic and harmonic motion, sequence is almost never entirely absent from a tonal composition. Yet there are characteristic formal and expressive functions for sequences, though they evolve. In the Classical style, sequences appear most frequently in developmental passages and have an expressive connotation of motion, transience, instability, tension. With the nineteenth century's preoccupation with emergent structures and Romantic longing, the relative proportion of sequences found in developmental passages decreases as sequences are more often prominent in principal thematic sections and endow them with instability and tension.

Sequences remain central to Brahms's developmental passages and occur in his principal thematic units with some frequency as well. The topic of this paper, however, is a different deployment of sequential writing. In Brahms's music—especially in his chamber works—sequences often provide a late expressive culmination in the final thematic return (in rondo-like forms) or in the coda, formal locations seemingly at odds with the sequence's traditional connotations. The first part of this paper categorizes these culminating sequences into two expressive types and observes the structural features most common in each. The paper then considers how these sequences recompose previous thematic material and thereby create large-scale structural process and expressive meaning.

#### "You Kiss Me as We Part": Unifying Techniques in Two Brahms Song Pairings Daniel B. Stevens, University of Delaware

While thematic connections are often understood as binding musical passages together, could they also threaten to collapse the distinction between two separate pieces? One of the most unusual features found in Brahms's "Liederstrauße" (song-bouquets) are the instances of adjacent songs that employ virtually identical thematic material. Unlike song cycles in which thematic recalls occur after intervening lieder (such as Beethoven's *An die Ferne Geliebte* or Schumann's *Dichterliebe*), these song pairings occur sequentially, and their thematic repetition blurs the boundaries of these songs, effectively erasing the silence between them. While recent commentators have acknowledged the complementary nature of these pairings, these songs also raise issues involving musical unity, the relation of text and music, and the contribution of performance to the identification of musical works as wholes.

Focusing on two song pairs from the op. 19 and 85 collections, I employ Schenkerian, formal, and textual analysis to suggest that these songs, far from exhibiting mundane repetitions, rather represent highly calculated attempts by Brahms to rethink how music and text may be interrelated across the double bar. By contrasting the unifying techniques employed in these two pairs, I argue not only that Brahms was creatively engaged in the problem—and potential—of thematic repetition but also that the significance of his compositional solutions hinges upon their actualization through performance.

## **Reprise in Schubert's Late Ternary Songs** David Bretherton, University of Southampton

This paper discusses three of Schubert's late ternary form songs in which his subtle reworking of reprised material produces deviations from both standard theoretical models and, crucially, from his own earlier practice. The analyses presented will demonstrate that a historically aware appreciation of song-form can provide a robust basis for musico-poetic interpretation.

In "Gondelfahrer" Schubert casts the tolling of midnight from St Mark's Tower as a mimetic, trance-like passage that is static on flat-VI and substitutes for the first phrase of the reprise. Schubert's musical bells match our real-life experience by distracting us at the outset of Section A' while formal time continues unabated.

Despite clear thematic links between Sections A and A' of "Auf dem Flusse," Sections A and B have more in common structurally. This disparity is illustrated by comparison to the use of a strikingly similar end-orientated voice-leading structure in "Der Doppelgänger," which is here set as a bar form (AAB).

In "Der Atlas" a three-part voice-leading structure is dispersed over the first two sections of a ternary form. The reprise (Section A') functions as a structural appendage prolonging scale degree 1, and this inactivity can be understood as alluding to the eternal nature of Atlas's punishment.

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