SMT
SOCIETY FOR MUSIC THEORY

43rd Annual Meeting
Joint with the American Musicological Society
November 7-8, 14-15, 2020

Program Schedule and Abstracts

Saturday, November 7

All times are in CST.
*Denotes joint session/meeting on SMT Platform

	Red Room	Blue Room	Green Room	Orange Room	Joint Sessions (AMS Site)
9:00 AM					**Morning Meditation**
10:00 AM	**CHINESE MUSIC AND CHINESE MUSIC THEORY** **Ya-Hui Cheng, Chair** **The Cultural Binds of Tonal Function** Anna Yu Wang **The Disunity of Ancient Chinese Music Theory** Lars Christensen	**FORCES, ENERGY, AND BALANCE** **Sarah Marlowe, Chair** **A Performative Perspective of Voice Leading** Peter Franck **Bach's Energetic Shapes** John Reef **Balancing, Not Balance/Imbalance: The "Melodic Center of Mass" as a Time-Dependent, Continuous Substitute for Atemporal, Discrete Inversional Axes** Tobias Tschiedl	**METER AND TIME POSTER SESSION** **Rebecca Jemian, Chair** **Connoted Semibreves in Pre-Franconian Theory** Kaho Inoue **Generative Meter and Phrase-Rhythmic Multivalence in Three Slavic Folk Tunes** Grant Sawatzky **Temporal Techniques in the Serial Music of Roberto Gerhard** Rachel Mann **Rhythmic Cycles and Ostinati as Formal Process in the Music of Tigran Hamasyan** Scott C. Schumann **Analyzing Drum Patterns and Drum Pattern Changes in Twenty-First Century Mainstream Pop** David Geary	**WORK AND FAMILY INTEREST GROUP MEETING**	
11:00 AM	**FRAUGHT INTERSECTIONS BETWEEN MUSIC THEORY AND ITS "OTHERS"** **Philip Ewell, Chair** **Becoming a Major Country: Modal Binaries in Imperial Japan** Liam Hynes-Tawa	**MAHLER** **Seth Monahan, Chair** **Structural Self-Reflection as Formal Determinant: Pure Memory and Mahler's Symphony no. 5** Emma Soldaat	**EARLY MUSIC ANALYSIS INTEREST GROUP MEETING**	**POST-1945 MUSIC ANALYSIS INTEREST GROUP MEETING**	

	Red Room	Blue Room	Green Room	Orange Room	Joint Sessions (AMS Site)
11:00 AM *(Cont.d)*	**"What Are We Trying to Preserve?" Vernacular Music Theory in the Barbershop Harmony Society** Clifton Boyd **Fugitive Music Theory: Outlining a Diverse Network of Practices and Practitioners** Marc Edward Hannaford	**The "Rondo" and the "Burleske" in Mahler's Rondo-Burleske** Sam Reenan			
12:00 PM	**CONTRAPUNTAL INNOVATIONS** **Christoph Neidhöfer, Chair** **What's New in the *Ars nova*?** Ryan Taycher **Mean Counterpoint and Temperamental Choices in the Early Baroque** Evan Campbell **"Dissonation" of Tonal Materials in Vivian Fine's Ultra-Modernist Compositions** Alexandrea Jonker	**GESTURE AND TRANSFORMATION IN INSTRUMENTAL PERFORMANCE** **Edward Klorman, Chair** **Sound Structures and Naked Fire Gestures in Cecil Taylor's Solo Piano Music** Mark Micchelli **Performing *Te*: Form and Gesture in Dai Fujikura's *neo* for Solo Shamisen** Toru Momii	**FORM POSTER SESSION** **Catrina S. Kim, Chair** **Felix Mendelssohn's Dominantized Tonics** Michael Baker **Some Perfect Authentic Cadences are More Perfect than Others** Poundie L. Burstein **Synthesizing the Tonal and Rhetorical Dramas of Franz Clement's D-Minor Violin Concerto** Tim Cutler and Sam Bivens **Phrase-Rhythmic Norms in Classical Expositions: A Corpus Study of Haydn's and Mozart's Piano Sonatas** Joseph Chi-Sing Siu **The Medial Subphrase in the Eighteenth-Century Spanish Style: Characteristics, Function, and Variants** Bryan Stevens	**MUSIC COGNITION INTEREST GROUP MEETING**	

Saturday, November 7

	Red Room	Blue Room	Green Room	Orange Room	Joint Sessions (AMS Site)
1:00 PM	**ON ROTATIONAL FORM** **Steven Vande Moortele, Chair** **"Rituals of Circularity": On the Conceptual Underpinnings of Rotational Form** Michael J. Puri **Formal Process as Reanimation of the Past in Enrique Granados's "Epílogo: Serenate del Espectro"** Audrey Jane Slote **The Sonata-Fugue Hybrid in Haydn's Early Symphonies** Carl Burdick	**MUSICAL EXPERIENCE IN TIME AND SPACE** **Aaron Harcus, Chair** **Conceptualizing Musical Narrative Space: A "Phenomenological" Journey through Chopin's Nocturne in F-sharp Minor, Op. 48/2** Dorian A. Mueller **Music Phenomenology in the Princeton School** Scott Gleason **Music Analysis as Esoteric Activity: Viktor Zuckerkandl at Eranos** Daphne Tan	**MUSIC THEORY PEDAGOGY INTEREST GROUP MEETING**	**RUSSIAN MUSIC THEORY INTEREST GROUP MEETING**	
2:00 PM	**GARY KARPINSKI'S *AURAL SKILLS ACQUISITION*: ITS INFLUENCE TWENTY YEARS POST-PUBLICATION AND FUTURE DIRECTIONS** **Cynthia I. Gonzales, Chair** **Daniel Shanahan, Respondent** **Gary Karpinski's *Aural Skills Acquisition*: Listening Skills** Timothy Chenette **Gary Karpinski's *Aural Skills Acquisition*: Sight Reading** Cynthia I. Gonzales **Gary Karpinski's *Aural Skills Acquisition*: Cognition of Aural Skills** Leigh VanHandel	**ANALYSIS OF MUSIC FOR DANCING** **Chris Stover, Chair** **The Hidden Influencers of Jazz: An Analysis of Eddie Brown's BS Chorus** Brenna J. Langille **Loving out Loud: Romantic Coupling in Early Sound Films (1928-1933)** Eric McKee **A Corpus Study of Metric Dissonance in Salsa** Rebecca Simpson-Litke **Pulse Dissonance in Colombian *Currulao*** Lina Sofia Tabak	**REDISCOVERING OPERA: THE POLITICS OF FORM, SEMIOTICS, AND REPRESENTATION** **Knar Abrahamyan, Chair** **Yayoi Uno Everett, Respondent** **The (Attempted) Subversion of Dissonance in Opera by the First Empire** Calvin Peck **Secularizing Soviet Armenia: Enacting Power Dynamics through Operatic Topoi** Knar Abrahamyan **Sounding Chosŏn: Form and Class Struggle in North Korea's *Sea of Blood*** Stephen Johnson	**INTEREST GROUP ON IMPROVISATION MEETING**	**2:00 – 3:50 PM** **WELCOME BREAK AND COFFEE RECEPTION**

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	Red Room	Blue Room	Green Room	Orange Room	Joint Sessions (AMS Site)
3:00 PM					**2:00 – 3:50 PM** **WELCOME BREAK AND COFFEE RECEPTION** *(CONTINUED)*
3:30 PM			**3:30 – 5:00 PM** **GRADUATE STUDENT WORKSHOP** **Analysis of Music and the Musicalized Moving Image** Anna Gawboy	**3:30 – 5:00 PM** **GRADUATE STUDENT WORKSHOP** **Theorizing Categorically: Film Music and Beyond** Scott Murphy	
5:00 PM					
6:00 PM					**6:00 – 7:30 PM** **LISTEN AND UNWIND**

Sunday, November 8

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	Red Room	Blue Room	Green Room	Orange Room	Joint Sessions (AMS Site)
9:00 AM					**MORNING MEDITATION SESSION**
10:00 AM	**MICRORHYTHM AND DISPLACEMENT IN HIP-HOP AND FUNK** **Anne Danielsen, Chair** **Functions of Microrhythm in Hip-Hop Flow** Ben Duinker **The Role of Beat Two in Funky Grooves** Michael Bruschi **Metric Feel and Form in "Superstition": Analyzing Stevie Wonder's Beat "Pockets"** Fred Hosken	**HISTORY OF THEORY** **Maryam A. Moshaver, Chair** **Where Zarlino Got His Listener** Russell O'Rourke **"In which it is evident that perception is always deceived": Pythagorean Rationality and Descartes' "Clear and Distinct Ideas"** David E. Cohen **Blinded by "Nature": Walter Young's "Essay on Rythmical Measures" (1790)** Carmel Raz	**TRANSFORMATIONAL AND SERIAL TECHNIQUES POSTER SESSION** **Richard Cohn, Chair** **N-dimensional Ski-hill Graphs and Complex Meters** Kája Lill **Reconsidering Negative Harmony: Melodic Dualism in Bárdos' Scalar Schemata** M.A. Coury-Hall **Schubert, Schoenberg, and Some Extensions to Cohn's SUM-Class System** David Orvek **Mapping Schnittke's Sequences in Bonded Uniform Triadic Transformation Spaces** Lauren Hartburg **George Theophilus Walker: A Unique, African-American, Voice in Twelve-Tone Music** Jack Boss and Tim S. Pack	**GLOBAL INTERCULTURALISM AND MUSICAL PERIPHERIES AND ANALYSIS OF WORLD MUSIC INTEREST GROUP JOINT MEETING**	
11:00 AM	**SALVATORE SCIARRINO'S NOVEL FORMS: ORGANIC IDEALS AND MULTILINEAR TEMPORALITIES** **Orit Hilewicz, Chair**	**SCHUBERT AND CHOPIN** **Sam Ng, Chair** **(Hyper)metrical Games in Schubert's Early Piano Sonatas** Stephen Gomez-Peck	**SCHEMAS, FRAMES, AND PARADIGMS POSTER SESSION** **Janna Saslaw, Chair**		**11:00 AM – 12:30 PM WORKSHOP** **HISTORIES OF MUSIC PEDAGOGY: TECHNIQUES, INSTITUTIONS, EPISTEMOLOGIES** **Emiy Dolan, Fanny Gribenski, Joshua Navon, Benjamin Steege, Anicia Timberlake, Michael Weinstein-Reiman, Lindsay Wright**

	Red Room	Blue Room	Green Room	Orange Room	Joint Sessions (AMS Site)
11:00 AM *(Cont.d)*	**Robert Hasegawa, Respondent** **Imperceptible Beginnings and Inescapable Endings: Suspended and Enhanced Temporality in the Semanticized Form of Salvatore Sciarrino** Christian Utz **Gestural Time and *Grundgestalt* in Sciarrino's *Recitativo Oscuro*** Antares Boyle **Through Chaos: Conceiving A New Organicism in the Music of Salvatore Sciarrino** Mingyue Li	**Form-Functional Displacement in Schubert's Sonata Forms** Caitlin Martinkus **Analyzing Chopin's Fourth Ballade Through a Two-Dimensional Lens** David Falterman	**Complicating the Modal Paradigm with the Music of William Byrd** Megan Kaes Long **What Kind of Linear Theory is Schema Theory?** Gilad Rabinovitch **Spectral Fission in Barbershop Harmony** Jordan Lenchitz **Tracing Music Theory's (un)Shifting Frames: A Natural Language Processing Approach** Tom Johnson and Megan Lavengood	**GLOBAL INTERCULTURALISM AND MUSICAL PERIPHERIES AND ANALYSIS OF WORLD MUSIC INTEREST GROUP JOINT MEETING** *(CONTINUED)*	**11:00 AM – 12:30 PM WORKSHOP** **HISTORIES OF MUSIC PEDAGOGY: TECHNIQUES, INSTITUTIONS, EPISTEMOLOGIES** *(CONTINUED)*
12:00 PM	**GENDER, DISABILITY, POLITICS, AND POPULAR MUSIC** **Karen Fournier, Chair** **Female-Fronted Death Metal: Expressing Alternative Femininities in Sound and Image** Lori Burns **Rhythmic Techniques in Signed Rap** Anabel Maler and Robert Komaniecki **Abe Road: The Beatles in Linguistic Simulacrum as Political Parody in Japan** Noriko Manabe	**VOICE LEADING SPACES AND TRANSFORMATION** **Robert L. Wells, Chair** **Collection Space: Systematizing Parsimonious Transformations in French Scalar Tonality** Matthew Kiple **Generic (Mod-7) Approaches to Chromatic Voice Leading** Leah Frederick **Parsimony in Microtonal Music** Greg Hartmann	**JAZZ INTEREST GROUP MEETING**	**AUTOGRAPHS AND ARCHIVAL DOCUMENTS INTEREST GROUP MEETING**	

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1:00 PM	**THE PERIOD AND CYCLIC FORM IN THE NINETEENTH CENTURY** **William Caplin, Chair** **Romantic Periods** Diego Cubero **Periodically Asymmetrical: On the Analytical Implications of an Expanded Antecedent** Xieyi (Abby) Zhang **Global Double Cycle and Damaged-Global Double Cycle as Representations of Fate in Nineteenth-Century Opera** Levi Walls	**RETHINKING WHAT COUNTS IN SERIAL MUSIC** **J. Daniel Jenkins, Chair** **Virgin Mary, *Voce Interna*, Hystericized Body: Simona Fabien's Melodic Disintegration in Dallapiccola's *Volo di notte* (1937-39)** Sabrina Clarke **Stockhausen as Gender-Bender? Serial Systems of Structure and Sex in the Opera Cycle *Licht*** Paul V. Miller	**DANCE AND MOVEMENT INTEREST GROUP MEETING**	**HISTORY OF THEORY INTEREST GROUP MEETING**	
2:00 PM	**THEORISTS TALK ABOUT SEX…IN MUSICALS** **Michael Buchler and Rachel Lumsden, Chairs** **The Waltz Topic and Aspects of Love in Broadway Shows after 1940** Greg Decker **Torch Song Ternaries: Broadway Medleys as Reinterpretation** Nathan Beary Blustein **Communism, Baptism, Canned Corn, and Other Salty Matters: Songs That Aren't About Sex (That Are Totally About Sex)** Michael Buchler	**NEW PERSPECTIVES ON REFERENTS IN ANALYSES OF IMPROVISATION** **Andrew Goldman, Chair** **Matthew W. Butterfield, Respondent** **Recomposing the Referent: An Ecological Perspective** Marc Edward Hannaford **Being Self-Referential** Garrett Michaelsen **The Problem of Invisible Transcribers: Towards a Materialist View of the Referent** Joon Park	**STORIES FROM THE FRONTLINES*** *Sponsored by the Committee on Race and Ethnicity* **Somangshu Mukherji, Chair** **Stifling Sameness: Hardships of Immigration, Parenthood, and Being Non-white Contingent Faculty** Adem Merter Birson **Assessing My Market Value: One Perspective on Contingent Labor in Music Theory** Catrina S. Kim **(Re)Visioning Race and Gender in Music Theory and Composition** Paula Grissom	**MUSIC AND PHILOSOPHY INTEREST GROUP MEETING**	

	Red Room	Blue Room	Green Room	Orange Room	Joint Sessions (AMS Site)
2:00 PM *(Cont.d)*	**Unraveling Uncertainty in Sondheim's Ladies** Richard J. Plotkin **"Queer Temporalities" in *Fun Home*** Rachel Lumsden **Desire in Hell: A Love Song That Transforms Gods and Men** Rachel Short **Tonality as Sexuality in *The Rocky Horror Show*** Nicole Biamonte	**Referents in the Palimpsests of Jazz: Disentangling Tune from Improvisation in Recordings of Ellington and Strayhorn's "Satin Doll"** Sean R. Smither **The Referent's Double** Michelle Yom	**Negotiating and Nurturing Ethnicity, Social Justice, Stress, and Trauma, Pre- and Post-COVID in an Urban Commuter College** Noé Dinnerstein **A Perspective from the Academic Labor Movement** Nazir Khan **Fighting for Class Equality Through the Power of Collective Bargaining: Toward Livable Working Conditions for Graduate Students in the Performing Arts** Anna Nelson **Make Sure Your Own Mask is Secure before Assisting Others: Contingent Faculty as Care Workers** Michael Berry **Extreme Adjuncting: When Contingent Labor Becomes the Norm** Reba Wissner **Navigating Academia, Single-Parenthood, and First-Gen Experiences** Patricia Hall		
3:00 PM					**3:00 – 4:50 PM** **COFFEE BREAK**
3:30 PM	**3:30 – 5:30 PM** **GRADUATE SCHOOL FAIR**				

	Red Room	Blue Room	Green Room	Orange Room	Joint Sessions (AMS Site)
5:00 PM	**3:30 – 5:30 PM** **GRADUATE SCHOOL FAIR** (CONTINUED)				**ROUNDTABLE** **5:00 – 6:30 PM** **MUSICAL INTERCULTURALITY: SCOPES, METHODS, APPROACHES** **Anna Maria Busse Berger, Tobias Janz, Larry Witzleben, Philip Bohlman, Martin Scherzinger, Christian utz, John Winzenburg, Nancy Yunhwa Rao, Yayoi Uno Everett, Presenters**
6:00 PM					**6:00 – 7:30 PM** **LISTEN AND UNWIND**

Saturday, November 14

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	Red Room	Blue Room	Green Room	Orange Room	Joint Sessions (AMS Site)
9:00 AM					**MORNING MEDITATION SESSION**
10:00 AM	**TEMPO, RHYTHM, AND GROOVE IN METAL MUSIC** **Jose M. Garza, Jr., Chair** **Tempo, But For Whom? Rhythmic Parallax in Car Bomb's "Blackened Battery"** Calder Hannan **How Much Math is in Math Rock? Riffs, Progressive Rhythm, and Embodied Music Theory** Stephen Hudson **"Dance to the Dissonant Sway": Groove, Headbanging, and Entrainment in Extreme Metal** Guy Capuzzo	**BRAHMS AND BEETHOVEN** **Frank Samarotto, Chair** **Musical Logic in the Slow Movement of Brahms's Second Symphony** Lucy Y. Liu **Revealing the Secret: The Musical Uncanny and its Narrative Implications in the *Finale* of Brahms's Piano Quintet in F minor, Op. 34** Risa Okina **The *Eroica* Continuity Sketches: A Form-Functional Perspective** Thomas Posen	**PEDAGOGY AND COGNITION POSTER SESSION** **Jenine Brown, Chair** **The Making of a Theorist: On the Cognition of Music-Theoretic Expertise** Sarah Gates **The Effect of Vertical Pitch Structures, Timbre, and Duration on Memory for Chords** Ivan Jimenez, Tuire Kuusi, Isabella Czedik-Eysenberg, Christoph Reuter **Using Principles of Crossmodal Perception to Promote Accessibility and Diversity in the Classroom** Sarah Louden **Spaced Learning, Screen Names, and Speed: Fluent Fundamentals In Fifty Minutes Per Week** Jennifer Shafer **Don't Count Your Cadences before They Hatch: Advocating for Discussions of Closure in Pedagogical Contexts** Brian Edward Jarvis and John Peterson	**QUEER RESOURCE GROUP MEETING**	**10:00 – 11:30 AM SPECIAL SESSION** **BLACK LIVES MATTER IN MUSIC: A CONVERSATION WITH TAZEWELL THOMPSON, LIBRETTIST OF "BLUE"** **Steve Swayne, Richard Desinord, Naomi Andre, Moderators**

Saturday, November 14

	Red Room	Blue Room	Green Room	Orange Room	Joint Sessions (AMS Site)
11:00 AM	**UNSETTLING ENCOUNTERS: TRANSFER, EXCHANGE, AND HYBRIDITY IN GLOBAL MUSIC THEORY** **Anna Zayaruznaya, Chair** **The Original Global and the Global Origins of Music Theory** Andrew Hicks **Pedagogy and Seduction in the Eighteenth-Century Mission Music of Bolivia** Roger Mathew Grant **Global Tonnetze** Daniel Walden	**SCRIPTS, SCHEMAS, AND PROTOTYPES** **Lawrence Zbikowski, Chair** **On Prototypes and the Prototypical: An Investigation of Music-Theoretic Concepts** Richard Ashley **Begging Cadences, or The Rossinian Art of Pandering** Matthew Boyle **The "Se cerca" Script: Dialogic Networks in an Eighteenth-Century Aria Tradition** Nathaniel Mitchell	**POPULAR MUSIC INTEREST GROUP MEETING**	**MUSIC AND DISABILITY INTEREST GROUP MEETING**	10:00 – 11:30 AM **SPECIAL SESSION** **BLACK LIVES MATTER IN MUSIC: A CONVERSATION WITH TAZEWELL THOMPSON, LIBRETTIST OF "BLUE"** **Steve Swayne, Richard Desinord, Naomi Andre, Moderators** *(CONTINUED)*
12:00 PM	**GESTURE, THE MIMETIC HYPOTHESIS, AND MUSICAL FEELS** **Juan Chattah, Chair** **Being Cecil, Feeling Feldman: Gestural Analysis of Two Avant-Garde Piano Works** Christa Cole **Mimetic Invitation in Shaw's *Partita for 8 Voices*** Crystal Peebles **Musical Feels** Dora A. Hanninen	**SONATA PROBLEMS** **Carissa Reddick, Chair** **Two Langerian Sonata-Form Problems, with Solutions by Beach and Medtner** Christopher Brody **Formal Problems as Opportune Inconveniences in Haydn's Late Piano Trios** Jan Miyake **Dvořák and Subordinate Theme Closure: "Positive" Analytical Results for a "Negative" Approach to Romantic Form** Peter H. Smith	**POPULAR AND VIDEO GAME MUSIC POSTER SESSION** **Elizabeth Medina-Gray, Chair** **Brawlers, Bawlers, and Bastards: The Semiotics of Vocal Timbre in the Music of Tom Waits** Joshua Albrecht **Key and Affect in the Million Song Dataset** Bronwen Garand-Sheridan **Analyzing Subversion in *Undertale* Through Soundscape** Stephanie Lind	**MUSIC AND PSYCHOANALYSIS INTEREST GROUP MEETING**	12:00 – 1:30 PM **WORKSHOP** **FOSTERING DECOLONIALITY: FROM LOCAL ARCHIVES TO GLOBAL DIALOGUE** **Robin Attas, Lilliana Saldaña, Lindelwa Dalamba, Philip Burnett, Yvonne Liao, David Irving, Roe-Min Kok, Presenters 12:00 – 1:30 PM WORKSHOP**

	Red Room	Blue Room	Green Room	Orange Room	Joint Sessions (AMS Site)
12:00 PM *(Cont.d)*			**An Idiom of Melodic-Harmonic Divorce: Sub-Circle Motion in Popular Music, and the Deceptive ♭VII^{add9}** S. Alexander Reed **Some Elements Of Form in American Popular Music, 1958–1991** Christopher Wm. White		**12:00 – 1:30 PM WORKSHOP** **FOSTERING DECOLONIALITY: FROM LOCAL ARCHIVES TO GLOBAL DIALOGUE** *(CONTINUED)*
1:00 PM	**ANALYZING RECORDINGS** **Bruno Alcade, Chair** **Microtiming the Marginal: The Expressive Rhythm of "Insignificant Noises" in Recordings by Claire Chase, Evgeny Kissin, and Maggie Teyte** Richard Beaudoin **Gendering Virtual Space: Vocal Placement in Recorded Popular Music** Michèle Duguay **Tempo as Form: Unnotated Orchestral Rubato in Early Recordings, Treatises, and Composition** Nathan Pell	**(RE)DEFINING DRAMA** **William Marvin, Chair** **Loosening the "Shackles" of Sonata Form: Intersections of Formal, Tonal, and Operatic Drama in *Fidelio*** Benjamin Graf and Graham Hunt **The Dramatic Potential of Auxiliary Cadences in Cole Porter Songs with Minor-to-Major Choruses** Morgan Markel **Discovering Dramaturgy in the Music of Sofia Gubaidulina via Valentina Kholopova's System of Expression Parameters** Sasha Drozzina	**WHO IS ALLOWED TO BE A GENIUS?** *Sponsored by the Committee on the Status for Women* **Judith Lochhead, Chair** **Laura Emmery, Moderator** **Genius and the Canon: The Effects of Exclusion** Cora Palfy **Contextualizing Musical Genius: Perspectives from Queer Theory** Vivian Luong and Taylor Myers **The Work of a Novice: Genius, Professionalism, and Contemporary American Women Monastic Composers** Charity Lofthouse **A Nun or Avant-Gardist? Heterogenous Creative Aspects in *Byzantine Concerto* by Serbian Composer Ljubica Marić as a Reaction on Socio-Esthetical Limitations of Former Yugoslav Milieu** Nikola Komatović		

	Red Room	Blue Room	Green Room	Orange Room	Joint Sessions (AMS Site)
1:00 PM *(Cont.d)*			**Romantic Geniuses, Idiot Savants, and Autistic People who are Good at Music** Joseph Straus **Artificial Creativity, Artificial Genius: Improvising Computers and the Listening Subject** Jessica Shand		
2:00 PM					
2:30 PM	**PLENARY SESSION*** **CHANGING THE STORY: EMBODIMENT AS MUSICAL PRACTICES AND EXPERIENCES** **Marion A. Guck, Chair** **Kinesthesis, Affectivity, and Music's Temporal (Re-/Dis-) Orientations** Mariusz Kozak **Dramatizing Difference: Embodying Music's Materiality and (Inter)subjective Dynamics (Nina Simone's "Little Girl Blue" from *Live at Montreaux 1976*)** Marianne Kielian-Gilbert **Music Theory in the 1970s and 1980s: Three Women** Fred Everett Maus **Embodying Music: Three Questions from Practice** Daphne Leong				

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3:00 PM	**PLENARY SESSION*** **CHANGING THE STORY: EMBODIMENT AS MUSICAL PRACTICES AND EXPERIENCES** *(CONTINUED)*				**3:00 – 4:50 PM** **COFFEE BREAK**
4:00 PM					**"MEANINGLESS EXCITEMENT AND SMOOTH ATONAL SOUND": PHISH AT THE INTERSECTION OF MUSIC THEORY AND CULTURAL STUDIES** **On the Persistence of Groove: Structural Fog and Jouissance in a "Split Open and Melt" Jam** Steven Reale **Towards a Classification System of Improvisational Types in Phish's Live Performances** Heather Laurel **Affective Music Theory, Public Musicology, and the Construction of Phish Fan Identity** Jacob A. Cohen
5:00 PM					
6:00 PM					**6:00 – 7:30 PM** **MODULATIONS AND INTERSECTIONS: DISABILITY AND THE (UN)CRITICAL ROLE OF MUSIC** **Jeannette Jones, Stefan Honisch, Chantal Lemire** **LISTEN AND UNWIND**

Sunday, November 15

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	Red Room	Blue Room	Green Room	Orange Room	Joint Sessions
9:00 AM					**MORNING MEDITATION**
10:00 AM	**NEW DIRECTIONS IN TOPIC THEORY** **Robert S. Hatten, Chair** **Musical Topics as Products and Tools of Historically Informed Performance** Olga Sánchez-Kisielewski **Beyond the Fusion Principle: Pop Topics in the Music of the Miles Davis Quintet, 1964 – 1972** Jesse Gardner **Transforming the Post-Tonal Topic in Ligeti's Violin Concerto** James Donaldson	**APROPOS WAGNER AND STRAUSS** **Alexander Rehding, Chair** **Precursors of the Tristan Chord and the "Till sixth" in Fétis's _Traité complet_ (1844)** Marie-Ève Piché **Sigfrid Karg-Elert's Common-Tone Transformation System, and His Analyses of Wagner's Magic Sleep Motive** David Byrne **Lyric Forms as "Performed" Speech in _Das Rheingold_** Craig Duke	**PROVINCIALIZING MUSIC THEORY: EPISTEMIC FRAMEWORKS FOR THE NEW COMPARATIVISM** **Gavin Lee, Chair** **C. Catherine Losada, Respondent** **Pre-Colonial Rhythm and Meter in Africa** Martin Scherzinger **Genealogy of the Pentatonic Scale** Gavin Lee **Comparative Musical Modernism: Jia Guoping's _Whispers of a Gentle Wind_ and Helmut Lachenmann's _Allegro Sostenuto_** John Roeder **Ultra-Modernism and the Cosmopolitan Ideal in the Late Music of Carlos Chávez** Amy Bauer	**MATHEMATICS OF MUSIC INTEREST GROUP MEETING**	
11:00 AM	**TIMBRE** **John Y. Lawrence, Chair** **Chord Spacing and Quality: Lessons from Timbre Research** Matt Chiu and Noah Kahrs **Janáček's Virtual Viola d'Amore** Ethan Edl	**BALANCHINE** **Maeve Sterbenz, Chair** **Stravinsky and Balanchine's Agon: A Laban Movement Analysis of the Music and Dance** Jacob Fitzpatrick			

	Red Room	Blue Room	Green Room	Orange Room	Joint Sessions
11:00 AM *(Cont.d)*	**The Acoustic Properties of Tanya Tagaq's Vocal Sounds as Situated on Timbral Continua** Kristi Hardman	**Swingin' Bach in Ballet: Motivic Development and Funky Rhythms in Balanchine's *Concerto Barocco* (1941)** Kara Yoo Leaman **Rhythm and Meter in Dance as Bergsonian *durée*** Amy Ming Wai Tai			
11:30 AM			**USING OPEN EDUCATIONAL RESOURCES FOR INCLUSIVE, FLEXIBLE, AND INNOVATIVE MUSIC THEORY PEDAGOGY** **Bryn Hughes, Chair and Discussant** **In the Trenches Using OMT** Kyle Gullings **Supporting AP Music Theory: Open Music Theory's Secondary School Outreach** Chelsey Hamm **Not Just a Theory: How to Put an Egalitarian Music Theory Curriculum into Practice** Megan Lavengood **Assessing for Retention: Modeling Creative, Multi-Use Quiz Design** Brian Edward Jarvis and John Peterson **Computational Methods for Augmented Anthologies** Mark Gotham		

	Red Room	Blue Room	Green Room	Orange Room	Joint Sessions
12:00 PM	**JONI MITCHELL** **Lloyd Whitesell, Chair** **Enactive Soundscapes: Physio-musical and Formal Process in the Music of Joni Mitchell** Peter Kaminsky and Megan Lyons **Metric Freedom and Confessional Performance Practice in Joni Mitchell's "Blue"** Nancy Murphy	**RECONSIDERING HIERARCHY AND SCHENKER** **Jason Hooper, Chair** **Emergent Hierarchies: Harmonic Reduction from the Bottom Up** David R. W. Sears **Redrawing Analytical Lines** Vivian Luong **Schenker's Nodal Points and the "Higher Requirement of Tonality"** Alan Dodson	**USING OPEN EDUCATIONAL RESOURCES FOR INCLUSIVE, FLEXIBLE, AND INNOVATIVE MUSIC THEORY PEDAGOGY** *(CONTINUED)*		**12:00 – 1:30 PM** **MEDIATING THE COLD WAR**
1:00 PM	**POSTWAR TRANSFORMATIONS OF THE AMERICAN COMMON STOCK** **Chelsea Burns, Chair** **The Transformation of Prewar Blues Into Postwar Rhythm and Blues** Nicholas Stoia **"Show Me": Fiddle Breaks and Politics in Country Covers of R&B** Jocelyn R. Neal **Common Stock Sources of Early American Punk** Evan Rapport	**CLARA AND ROBERT SCHUMANN** **Stephen Rodgers, Chair** **Entextualization in Clara Schumann's Nineteenth-Century Pianism** Andrew Malilay White **Beyond *Vierhebigkeit*: Phrase Structure and Poetic Meaning in Three Lieder by Clara Schumann** Julie Pedneault-Deslauriers **Parenthetical Insertions and Ellipses in Robert Schumann's Eichendorff *Liederkreis*** Alexander Martin	**ROLE AND ETHICS IN THE PEER REVIEW PROCESS*** *Sponsored by the Professional Development Committee* **Nicole Biamonte, Chair and Moderator** **Jennifer Iverson, Christopher Segall, Joseph Straus, Panelists**	**MUSIC INFORMATICS INTEREST GROUP MEETING**	
2:00 PM					**2:00 – 3:30 PM** **THE SOUND OBJECT AND MUSIC MEDIA** **Kate Galloway**
2:30 PM	**BUSINESS MEETING**				
3:00 PM	**AWARDS PRESENTATION***				**3:00 – 4:50 PM** **COFFEE BREAK**

	Red Room	Blue Room	Green Room	Orange Room	Joint Sessions
5:00 PM					**SUBSTANTIAL SIMILARITY AND THE ROLE OF FORENSIC MUSICOLOGY IN MUSIC COPYRIGHT LITIGATION** **Sharp Contrasts on "Blurred Lines": *Williams v. Gaye* and a Clash of *Amici*** André Redwood **Searching for Similarity: Confirmation Bias in Partisan Forensic Musicology** Dana DeVlieger **When Analysis is Performance, What Ethical Guidelines Must Forensic Musicologists Consider?** Devin Chaloux **Melody, "Beats," and Minimalism: Protectability in Contemporary Popular Music** Alexander Stewart **Can You Copyright a Chord Progression?: Evaluating Harmonic Similarity in Federal Copyright Litigation** Katherine Leo
6:00 PM					**6:00 – 7:30 PM** **AMS PEDAGOGY STUDY GROUP/SMT MUSIC THEORY PEDAGOGY INTEREST GROUP (TBD)** **6:00 – 8:00 PM** **LISTEN AND UNWIND**

SATURDAY, NOVEMBER 7

CHINESE MUSIC AND CHINESE MUSIC THEORY
Ya-Hui Cheng (University of South Florida), Chair

The Cultural Binds of Tonal Function
Anna Yu Wang (Harvard University)

Analysis of culturally unfamiliar music, or "world music," is a burgeoning subdiscipline whose maturation brings a fresh tangle of methodological problems into the purview of North American music theory. How can we analyze world musics in a culturally resonant and ethical manner, and how do we theorize musical experiences that appear to contradict our own acquired intuitions? Taking as a case study tonal function in a Chinese theatrical tradition called *huangmei* opera, I draw on ethnographer Dwight Conquergood's framework of dialogical performance and ethnomusicologist Judith Becker's notion of *habitus of listening* to propose a model of analysis underpinned by fieldwork and two-way inquiry.

My case study concerns the phenomenon that *sol*—the fourth tone in the pentatonic sequences C-D-E-G-A, D-E-F♯-A-B, E-F♯-G♯-B-C♯, etc.—forms the final sonority of most *huangmei* opera works. Indeed, *sol*-ending *huangmei* opera melodies can evoke greater structural closure than juxtaposing *do*-ending melodies, revealing sharp incongruencies with how tonal functions are imagined in Western art music. Reflecting on ethnographic encounters with musicians of *huangmei* opera, I trace their tonal experiences of *sol* and *do* back to several socially ingrained frameworks, including the tonal profiles found in ancient Chinese ritual texts and a cross-disciplinary aesthetic ideal known as 韵味(*yunwei*). Ultimately, I wish to suggest that the experience of tonal function, whether in *huangmei* opera or Western art music, must appeal to the relevant *habitus of listening*—the particular nexus of social narratives within which a musical intuition resides—in order to accrue cultural resonance and musical significance.

The Disunity of Ancient Chinese Music Theory
Lars Christensen (Saint Paul, MN)

Postcolonial critics have noted the homogenizing effect cultural distance can have as intracultural differences are downplayed to emphasize perceived essences. Scholars of non-Western music often assimilate the ideas of various theorists to construct a seemingly impersonal system that can serve as an "emic" analytic tool. For example, modern writers might posit an ancient and unified Chinese tuning system, based on a standard pitch and generated using alternating ratios of 2:3 and 4:3. This is not wrong, but such coherence was hardly the experience of the theorists they draw on, who struggled to situate themselves within a bewildering array of competing systems. For them, such commonalities were too obvious or fundamental to require much comment, and they might have seen only contradictions that resist elision.

In this paper, I translate and analyze a passage by Northern Song scholar, Chen Yang, from his magisterial *Book of Music* (1101). In the introduction to a section on tuning, he briefly surveys the work of eleven theorists spanning eight centuries, concentrating on how their approaches cannot be reconciled. Chen omits anyone from the preceding 450 years, implying it is not simply the trope of Tang decadence, but instead that the figures of the distant past themselves did not describe a singular

theory, but rather a set of variations on a theme. We collapse these variations at the risk of greatly simplifying the intellectual milieu and decontextualizing the innovations of later theorists, who were not so much stepping beyond classical precedent as participating in a longstanding conversation.

FORCES, ENERGY, AND BALANCE
Sarah Marlowe (Eastman School of Music), Chair

A Performative Perspective of Voice Leading
Peter Franck (Western University)

Recent research concerning embodied cognition and agency showcases how a performative perspective impacts music analysis: De Souza (2018) treats musical instruments as spaces through which performers may navigate and Klorman (2016) treats performers of chamber works as characters whom may engage in conversation. Both approaches make correspondences between actions of real or idealized performers and abstract models, such as networks of fretboard shapes or formal functions. These correspondences demonstrate that a performative perspective involves an interface between physical actions and theoretical frameworks. Viewed this way, a performative perspective is neither entirely physically grounded nor abstractly oriented, but rather situated on a continuum between these poles. Such a context enables analysts to confer agency upon performers by making them obvious representatives of physicality. But the continuum along which the performative perspective resides enables any phenomenon—physical or abstract—to play such roles. Indeed, Schenker often imparts agency to abstract constructs. For instance, he writes, "The fundamental structure is always creating, always present and active" (Schenker 1979, 18). A performative perspective, thus, permits analysts to grant agency to any phenomenon they see fit, be it a performer, instrument, or linear progression, to name just a few. With this broad interpretation in mind, the paper explores how a performative perspective can enhance analysis by endowing voice-leading strands with agency. The paper first presents models adapted from cognitive linguistics for explaining meanings of concepts related to causation and then applies them to analyses of select works.

Bach's Energetic Shapes
John Reef (Nazareth College)

A remarkable aspect of J. S. Bach's music is his "energetic" shaping of melody and counterpoint within short (two- to four-measure) phrases. Through apparent enactments of various efforts, tensions, or motions within phrases, melodic/contrapuntal content may seem to resist, or even exceed, its "grouping" boundaries. To investigate such shaping, I situate inside Bach's contrapuntal textures an imaginary musical "agency" that manipulates the voice leading, register, and tonal rhythm of prior units of tonal structure, on the one hand giving them distinction as groups, and on the other generating the energy by which they exceed their boundaries. Speculatively, I identify two essential ways in which this is accomplished. First, energetic tendencies may develop directly from the resolution of tonal and/or tonal-rhythmic tensions within a musical group and then manifest as "motivated" linear motion beyond that group. Second, they may develop through tensions left unresolved within a group. These situations frequently involve gaps in register, as if representing an agential attempt to break free of an underlying linearity. Through analysis of selected generically favorable passages (e.g., from fugue expositions, dance suite movements, and/or concerto/aria ritornellos), I hope to expand our metaphorical understanding of musical motion and to develop the variety of narratives to which we appeal in our interpretations.

Balancing, Not Balance/Imbalance:
The "Melodic Center of Mass" as a Time-Dependent,
Continuous Substitute for Atemporal, Discrete Inversional Axes
Tobias Tschiedl (McGill University)

The embodied rhetorics accompanying transformational theory have often served to vindicate its mathematical apparatus (Lewin 1987; Attas 2009; Straus 2011a), yet rarely has attention been devoted to the question whether that fundamentally discrete apparatus is at all suited to capture the continuous motion implied in wording such as "gesture" and "dance."

As an instance of this larger problem, I focus on the concept of inversional symmetry and its analytical application. In an examination of Straus's (2011b) reading of inversional symmetry in Schoenberg and Webern in terms of "balance lost and regained," I show that his twelve-tone-derived analytical toolbox itself presupposes a discrete and static opposition between balance and imbalance rather than a continuous and dynamic process of balanc*ing*. Consequently, such an analysis does not allow for a gradual going-in-and-out-of-balance, or for any finer-grained distinction between different asymmetric states.

To address these shortcomings, I introduce a computer-assisted procedure that interprets inversional axes as a special instance of a general feature of pitch distributions, which I call their *melodic center of mass* (MCM), in analogy to physical centers of mass. The MCM of melodies can be tracked through time by means of a moving-average algorithm.

METER AND TIME POSTER SESSION
Rebecca Jemian (University of Louisville), Chair

Connoted Semibreves in Pre-Franconian Theory
Kaho Inoue (Tokyo University of the Arts)

Most pre-Franconian works deal with semibreves ambiguously despite their stress on longs and breves, although two forms of semibreves, the minor and the major, were proposed by Lambertus (c. 1270) and disseminated by Franco of Cologne (c. 1280). However, this does not mean that pre-Franconian theory ignores semibreves; it instead tends to explain this note value without explicitly using the term "semibreve." This presentation therefore aims at clarifying concepts and functions of these "connoted" semibreves in pre-Franconian treatises.

Connoted semibreves are found mainly in two forms: *opposita proprietas* and the "reduction to a three-note ligature." Johannes de Garlandia (c. 1260) defines that within a ligature of *opposita proprietas*, regardless of how many preceding notes are juxtaposed before a long, the whole length of them is equivalent to one breve. Here, the preceding notes imply semibreves. Additionally, several pre-Franconian treatises, including Garlandia and Anonymous VII (c. 1270), observe the rule of the reduction to a three-note ligature. Particularly according to Garlandia, the length of the preceding notes—except the penultimate and ultimate notes—in a more-than-three-note ligature corresponds to the first note in a three-note ligature, namely, a long. Here again, the preceding notes can be breves or semibreves. In both principles, the connoted semibreves have flexibility in that their duration is changeable according to the number of preceding notes within a ligature. I also argue that this flexibility might have been inherited by Petronian notation (after 1280), in which three and more semibreves are placed for one breve.

Generative Meter and Phrase-Rhythmic Multivalence in Three Slavic Folk Tunes

Grant Sawatzky (University of British Columbia)

Using three Slavic folk tunes, I demonstrate an analytical approach for irregular phrase-rhythmic structures that involves anti-metrical motivic parallelisms and aperiodicities. The three generative analyses illustrate how melodic, harmonic, and rhythmic groupings interact to create phrase-rhythm, regardless of whether the structures involved are periodic enough to establish hypermeter, or idiomatic enough to invite comparison to normative phrase lengths. The music theory literature has addressed issues of rhythmic/metric irregularity, including well-known accounts of irregular rhythm in Stravinsky (for whom Slavic folk tunes were a source material). Analyzing rhythmic irregularity in Stravinsky's music, theorists have described the unique time-sense engendered by aperiodic structures using concepts such as Van den Toorn's "strong-weak reversal" or Horlacher's "metric reinterpretation." Both concepts involve analyzing phrase-rhythmic irregularity with reference to how a passage conforms to some *a priori* regular metric structure; i.e. irregular tunes are described in terms of what they distort rather than in terms of what they create. I describe irregularity in positive terms by conceiving of meter and phrase-type as generative rather than conformational schemas (Bonds, 1991). The generative view I endorse does not take alternate possibilities to be in conflict (e.g. Krebs' "metrical dissonance"), nor as an ambiguity to be clarified by the performer (e.g. London's "metric malleability"). Instead, I propose that co-present grouping structures mutually inform one another and establish phrase-rhythmic multivalences, imbuing these short and repetitive game-songs with their characteristic playfulness. In this way, their phrase-rhythmic whole is greater than the sum of its parts.

Temporal Techniques in the Serial Music of Roberto Gerhard

Rachel Mann (University of Texas Rio Grande Valley)

While best known as a student of Arnold Schoenberg, Catalan composer Roberto Gerhard (1896–1970) composed works covering a broad range of styles and genres and was a pioneer of electronic music in England. His position as a student in Schoenberg's inner circle is reason enough to examine his writings on the twelve-tone method and serialism, but Gerhard also held close associations with the European avant-garde through his active involvement in the International Society for Contemporary Music and developed connections with the American musical community in the 1960s, earning commissions from prominent ensembles and teaching appointments at the University of Michigan and Tanglewood.

In an examination of his two published string quartets, Symphony no. 2 (Metamorphoses), and *Hymnody*, I will show how Gerhard serialized temporal elements in a way that clearly differed from his contemporaries. Gerhard used time series to govern both pitch durations as well as the number of beats per bar (offering compositional freedom to use pitches of any duration). Additionally, by dividing a time series into time sets, Gerhard added together each time set's pcs to generate proportions for governing elements such as tempo markings, phrase lengths and rotations, and large-scale formal sections. While these few examples show some of the numerous ways Gerhard serialized time and space, a closer examination of his compositions, essays, notes, and lectures—particularly those written between 1945–1970—reveals a body of music and scholarship that, as Meirion Bowen claims, is essential to the modern repertoire.

Rhythmic Cycles and Ostinati as Formal Process in the Music of Tigran Hamasyan
Scott C. Schumann (Central Michigan University)

Gretchen Horlacher's work on cycles in Stravinsky's music analyzes the rhythmic and contrapuntal interactions between ostinati, suggesting that these cycles create "a sense of progression among events," and "produce a formal framework through the joint completion among strata of a contrapuntal pattern" (1992, 173). While there are a number of styles used in the music of pianist and composer Tigran Hamasyan (Armenian folk music, jazz, prog rock, etc.), the analyses in this poster focus on the use of asymmetrical meter, ostinati, and cycles throughout his compositional output. Three types of cycles (phrase, structural, and evolutionary) are defined and discussed using several transcribed examples of Hamasyan's compositions.

Analyzing Drum Patterns and Drum Pattern Changes
in Twenty-First Century Mainstream Pop
David Geary (Wake Forest University)

In many genres of popular music, the drums perform a fixed rhythmic layer called a drum pattern. Further, most analytical methods either compare specific drum patterns to more generalized rhythmic structures or treat the drums as a backdrop for evaluating rhythmic variability in other parts. In twenty-first century mainstream pop, however, the drums alone provide both fixed and variable elements. A close study of Billboard's top fifty pop songs from 2018 shows that individual tracks have an average of four drum patterns and eight drum pattern changes—the action of moving between adjacent drum patterns—and as many as nine and eighteen. The first goal of this presentation is to outline the three musical characteristics that vary most regularly amongst a song's multiple drum patterns: number of layers, rhythm, and instrumentation. This corpus also shows that patterns typically match the rhetorical function of formal areas. The second goal is to define two types of drum pattern changes: drum buildups and drum decays. Both of these musical processes can create a sense of trajectory across different spans of musical material as well as for different expressive effects—and the two are regularly combined in individual tracks. Together, analyzing drum patterns and drum pattern changes can be a new way to highlight expressive variability in this repertoire, and it can also be used to refine other types of popular music analysis.

FRAUGHT INTERSECTIONS BETWEEN MUSIC THEORY AND ITS "OTHERS"
Philip Ewell (Hunter College CUNY), Chair

Becoming a Major Country: Modal Binaries in Imperial Japan
Liam Hynes-Tawa (Yale University)

 "China is a major-mode country—it has no minor-mode sounds. Japan is a minor-mode country, and it has no major-mode sounds."

The above is a free translation of an extract from Yoshida Kenkō's fourteenth-century *Tsurezuregusa*. He did not, of course, actually write about the major and minor modes as the West would come to know them, but Japanese musicians of the late nineteenth and early twentieth centuries would have interpreted his pronouncement along such lines, because of the way they mapped Japanese modes onto Western tonality after the Meiji Restoration of 1868. The way Japanese musicians adapted the Western minor mode in the service of harmonizing their own modes has been discussed before, but this paper brings more attention to the identification of the minor mode itself with Japan, and on the comparative foreignness of the major.

In its effort to become a formidable competitor on the stage of Western-style imperialism, Japanese musicians faced a dilemma: they had to assimilate the Western major mode, while at the same time re-theorizing and legitimizing their own modes, which coded to Western ears as minor. This paper tracks the meanings held by the major-minor binary in Japan's imperial period between 1868 and 1945, teasing out the various ways in which the major mode's alignment with Western powers and the minor's alignment with Japan's own background was leveraged towards a nation-building project with consequences that produced curious musical results and a legacy of violent trauma that remains painful today for a great many peoples.

"What Are We Trying to Preserve?"
Vernacular Music Theory in the Barbershop Harmony Society
Clifton Boyd (Yale University)

The Barbershop Harmony Society (BHS) has long concerned itself with the preservation of the barbershop style—in fact, the BHS was founded in 1938 as the "Society for the *Preservation* and Encouragement of Barber Shop Quartet Singing in America." While this may seem like a harmless detail, the BHS's characteristic aversion to change is also reflected in its history of racial and gender discrimination. The Society recently launched a new diversity initiative, "Everyone in Harmony" (2017–), but the question remains: how is the changing social culture of the BHS reflected in the musical aesthetics it values?

In this paper I treat the BHS as a case study for how communities leverage musical style in processes of institution building. I discuss several style treatises published by the BHS—these texts are prime examples of what I term "vernacular music theory," i.e. music theory that is produced by practitioners, for practitioners. I argue that while the Society has relaxed its harmonic requirements over time, their impulse to preserve the style has limited the forms of barbershop allowed in competition and other settings, which has directly impacted the demographics of those who choose to engage with the style. Furthermore, I reflect on the BHS's contemporary moment as they learn to accommodate women's and mixed-gender ensembles through the "Everyone in Harmony" initiative. I conclude by arguing that the BHS's pursuit of balance between preservation and modernization provides insight into academic practices of music theory, most notably our field's recent efforts to "reframe music theory."

Fugitive Music Theory: Outlining a Diverse Network of Practices and Practitioners
Marc Edward Hannaford (University of Michigan)

Amid renewed calls for professional academic organizations to foster more inclusive communities, research, and pedagogy, we must present a more diverse history of music theory to our peers and students. Educator and lawyer Kiera O'Shea Vargas (2019) argues for the importance of "seeing yourself": diverse representation fosters multiple perspectives and a sense of belonging for those alienated by traditional, Eurocentric canons. Broadening our understanding of who and what counts in music theory can thus help welcome new people and ideas into our communities.

My paper addresses this call by outlining a broad network of what I call fugitive music theory, which comprises music theoretical practices by black experimentalists and jazz musicians. Fugitive music theory comprises three categories: first, original texts; second, engagements with pre-existing music theoretical texts; and last, musicians' metaphorical, conceptual, and metaphysical descriptions of their work, which serve as points of departure for analysis. I discuss examples from each of these groups and extract potent theoretical reverberations.

My project resonates with work by Thomas Christensen (2011, 2015) and Steven Rings (2013) among others, who highlight discursive realms beyond those within conventional histories of music theory. I contribute to this conversation by foregrounding the racialized nature of disciplinary inclusion and exclusion: I suggest that broadening our understanding of who and what counts as part of our discipline benefits both our community and the intellectual work that it produces and embraces.

MAHLER
Seth Monahan (Yale School of Music), Chair

Structural Self-Reflection as Formal Determinant:
Pure Memory and Mahler's Symphony no. 5
Emma Soldaat (University of Toronto)

Mahler's symphonies frequently progress in a manner that negates the traditional directionality of symphonic form, allowing for multiple temporalities within a single work or movement (Johnson 2014, 2017; Monahan 2015; Samuels 2011). As Johnson (2017) notes, Mahler's forms incorporate moments of "structural self-reflection," where the music halts forward progression and gives way to a static passage. In this paper, I argue that one such moment of reflexivity—in the Scherzo of Mahler's Fifth Symphony—is more than a break from the symphony's formal flow. Using Bergson's concept of "pure memory," I show how this reflexive space expands the Scherzo's possible future actions from linear and pre-determined to open and free-associative.

The movement begins as a typical five-part scherzo with two contrasting trios. Its formal boundaries become blurred, however, in the latter half of the piece. A moment of reflexivity appears midway through the second trio, acting as an invocation of pure memory that halts the work's flow; after this point, the relatively routine linear progression of the scherzo is denied. The second trio is expanded significantly, and a development is introduced that incorporates musical material from the refrain and both trios. These sections appear as a non-linear jumble of motives, as the return of each section is densely permeated with other sections' material. Viewing pure memory as a constitutive component of the Scherzo's form allows for musical progression that exists outside of linear temporality, while providing a means of perceiving structural coherence amid such seemingly chaotic instances of motivic density.

The "Rondo" and the "Burleske" in Mahler's Rondo-Burleske
Sam Reenan (Eastman School of Music)

Titles speak volumes. For Eric Drott, titles serve "a 'rhetorical' or communicative function, in addition to a taxonomic one" (2013, 4). Gustav Mahler's label for the third movement of his Ninth Symphony, "Rondo-Burleske," establishes the work's semantic and interpretive context, prompting the analyst to evaluate whether the movement is a rondo at all. Its title summons generic and formal expectations, yet Mahler's Rondo-Burleske is unlike any rondo before it. The most challenging interpretive issues concern the "rondo theme" itself and the long passage of suspended music at the heart of the movement. In this paper, I will approach a large-scale formal analysis in the spirit of James Webster's (2009) "multivalent analysis." I balance formal function and Sonata Theory, while foregrounding genre and the theories of Mikhail Bakhtin in an account of the movement as a unique formal hybrid distinct from standard sonata-rondo prototypes.

As a burlesque, the movement reflects several parodic tendencies. In terms of genre, the rondo eschews the normative light symphonic finale; rhetorically, the movement is more chaos than order,

incongruous with its formulaic precedents. Perhaps of greatest significance is the movement's paradoxical relation to the symphony as a whole: in formal layout and motivic content, it is eerily similar to the *Adagio* finale. While neither movement is expressly in rondo form, each is in dialogue with it. I envision the Rondo-Burleske as a *functional* finale, while the *Adagio* follows as a transcendent postlude, rectifying the false logic of its antecedent.

CONTRAPUNTAL INNOVATIONS
Christoph Neidhöfer (McGill University), Chair

What's New in the *Ars nova*?
Ryan Taycher (Chicago, IL)

When discussing the innovations of the *Ars nova*, scholars have focused primarily on the rhythmic novelties of the new mensural system in the fourteenth century. While this is indeed a pivotal development in Western music history, the new rhythmic possibilities alone do not sufficiently account for the stylistic changes that distinguish the *Ars nova* from the preceding *Ars antiqua*. In my paper, I first will trace the role and status of the *tempus* in thirteenth- and fourteenth-century mensural theories, highlighting the shift from an additive/Augustinian conception of musical time to a divisional conception predicated on Aristotle's *Physics*. Then I argue that as a consequence of this shift, the way in which musicians conceived of elaborating an underlying tonal structure changed significantly. In the musical examples of thirteenth-century treatises, such as the *Tractatus de discantu* (CoussemakerS, i, Anon.2) and the Vatican Organum Treatise, the elaborations are interpolated between structural sonorities, facilitating the traversal from one to the next through the additive arrangement of ornamental melodic figures. However, in fourteenth-century *contrapunctus* treatise examples, such as in *De diminutione contrapuncti* and Petrus dictus Palma Ociosa's *Compendium de discantu mensurabili*, the note-against-note foundation "may be divided" into diminished counterpoint, first with basic elaborations and then with further ornamentation to produce florid discant. In this sense, the elaboration is understood as being derived from and an outgrowth of the structural note, to which it leads back ("*reducuntur*"), and *contrapunctus* thus serves as an ontological foundation for the ornamented tonal edifice built upon it.

Mean Counterpoint and Temperamental Choices in the Early Baroque
Evan Campbell (State University of New York Potsdam)

Few scholars have remarked on the relationship between counterpoint and meantone temperament in the early Baroque, yet this relationship explains seemingly anomalous features in contrapuntal writing from this time. These features affect stretto fugae (Milsom 2005), sequences (Harrison 2003), and contrapuntal modules (Owens 1984; Schubert 2007). Adriano Banchieri describes a "rule of strict counterpoint" (hereafter, RSC) in his *Cartella musicale* (1614) that accounts for the relationship between counterpoint and meantone temperament. I apply his rule to examples from Chiara Margarita Cozzolani and Claudio Monteverdi to show how apparently anomalous features result from meantone limitations.

First, I illustrate how Cozzolani begins and ends sequences in specific locations in her psalm setting, "Dixit Dominus a8" (*Salmi a otto voci concertati*, op. 3, 1650), that correlate with the limits described by Banchieri's RSC. Next, I analyze a different passage from Cozzolani's piece, as well as a passage from Monteverdi's "Dixit Dominus Secondo" (*Selva morale e spirituale*, 1641), to show how contrapuntal modules (repeated multi-voice units of counterpoint) are transposed to only those locations that avoid violating Banchieri's RSC. Finally, I examine a passage from Monteverdi's "Dixit Dominus Primo"

(*Selva morale*) to show how Banchieri's RSC accounts for Monteverdi's selection of accidentals and specific contrapuntal adjustments in his stretto fuga.

Reconceptualizing counterpoint in relation to temperament highlights a previously overlooked dimension of early Baroque composition. Banchieri's RSC provides analysts with a simple tool to examine this dimension while complimenting work done by other scholars, including the contrapuntal techniques discussed in this presentation.

"Dissonation" of Tonal Materials in Vivian Fine's Ultra-Modernist Compositions
Alexandrea Jonker (McGill University)

Dissonant counterpoint, a compositional technique used by "ultra-modernist" composers in America during the 1920s and 1930s, is designed to exclude tonal references through a rigorous process of "dissonation." A treatise co-authored by Charles Seeger and Ruth Crawford outlines the precepts of dissonant counterpoint, whose ultimate goal was for polyphonic voices to "sound apart," or be independent, to create "heterophony" (Seeger 1994 [1930]).

Vivian Fine (1913–2000), Crawford's most prolific and successful student, followed the compositional style of her teacher in many ways (Lumsden 2017), including the use of dissonant counterpoint in the music she wrote while studying, or shortly after studying, with Crawford. But there is one important and previously unnoted exception: within a generally dissonant framework, Fine's music makes extensive reference to tonal materials, including melodic fourths and fifths, and major and minor triads. The coalescence of these two irreconcilable forces creates a tension that suggests a new kind of heterophony, one in which the "sounding apart" occurs between the tonal references and the dissonant framework that struggles to contain them.

By analyzing several of Fine's ultra-modernist pieces, I aim to show the ways in which she manipulated dissonant counterpoint into her own unique style, one in which tonal materials play a fundamental role in the heterophonic "sounding apart." Ultimately, this paper extends the notion of dissonance beyond the quality of an interval or chord to include the conceptual conflict between consonances and dissonances themselves.

GESTURE AND TRANSFORMATION IN INSTRUMENTAL PERFORMANCE
Edward Klorman (McGill University), Chair

Sound Structures and Naked Fire Gestures in Cecil Taylor's Solo Piano Music
Mark Micchelli (University of Pittsburgh)

Despite being a prolific composer, Cecil Taylor was notoriously averse to notation. In his essay, "Sound Structure of Subculture Becoming Major Breath/Naked Fire Gesture," Taylor insists that Western notation blocks total absorption in the action playing. This notion of action playing is key to understanding Taylor's music: for Taylor, sound does not precede movement; rather, movement precedes sound. This paper analyzes Taylor's work on his own terms, using contour theory as a bridge from notation-based to embodiment-centric approaches to analysis. I will use my own transcriptions of Taylor's solo piano music to show how his compositions and improvisations are easily divisible into cells of notes, which obey a strict set of invented rules concerning repetition, transposition, and right-to-left-hand mapping. I will then show how these cells may be taxonomized using a surprisingly limited set of contour segments (CSEGs). Finally, I will demonstrate how these cells reveal the mechanisms through which Taylor's highly kinetic performances are made possible: CSEGs translate

directly into piano fingerings, and the shapes and variations of his cells conform effortlessly to the physiology of the hand. Understanding Taylor's music less as notation, but more as the organization of physical gestures, not only suggests a new approach to analyzing free jazz, but also provides insight into how the complex intertwining of sound and movement affects the process of improvisation as a whole.

Performing *Te*: Form and Gesture in Dai Fujikura's *neo* for Solo Shamisen
Toru Momii (Columbia University)

This paper proposes a performer-oriented methodology for analyzing contemporary music for the shamisen, a Japanese three-stringed lute-like instrument. While a number of studies on shamisen music focus on pitch- and rhythm-based similarities to categorize idiomatic melodic patterns (Machida 1983; Tokita 2000), others de-emphasize pitch to argue that performers are more concerned with timbre and performance technique (Ōtsuka 1989; Schmuckal 2016). I build upon the two threads by analyzing *neo* (2014)—a piece for solo shamisen by Dai Fujikura—through the concept of *te*, a term used by shamisen players to refer to (1) recurring melodic patterns, and (2) their characteristic fingerings, hand positions, and performance techniques. My analysis of *neo* highlights how a performer's use of *te* can shape the form of a piece. By adopting a *te*-based approach, I expand the scope of pitch- and rhythm-based analysis to highlight the interactions between form, gesture, and timbre in contemporary shamisen performance. Through aural and visual analysis of performances by Hidejiro Honjoh—the shamisen player for whom *neo* was written—I demonstrate how the form of *neo* unfolds through changes in *te*. First, I demonstrate how each section of *neo* is associated with a unique *te*. Second, I argue that the melodic patterns in each section are unified by *te* rather than by pitch. Third, I demonstrate how Honjoh's performance highlights similarities in *te* across sections with different motivic material.

FORM POSTER SESSION
Catrina S. Kim (University of North Carolina at Greensboro), Chair

Felix Mendelssohn's Dominantized Tonics
Michael Baker (University of Kentucky)

A common use of tonicization involves altering the overall tonic harmony to momentarily sound like the applied dominant of IV. However, when this occurs directly at the outset of a composition, it immediately casts doubt upon the opening tonic's role as the decisive signifier of tonality. A similar expressive effect occurs when the V7/IV accompanies the melodic *Urlinie* closure, motivating a post-cadential prolongation technique common to works featuring this device. In each case, the apparent tonicization of IV is only of passing interest when compared to the destabilizing chromatic alteration of the overall tonic harmony. Whereas numerous composers may have occasionally employed dominantized tonics in this manner, this technique occurs with a marked frequency in the songs of Felix Mendelssohn, a composer considerably less regarded for his songs than for his accomplishments in other, instrumental genres. This poster will examine four particularly important compositional uses in Mendelssohn's songs: (1) beginning an entire song immediately on the dominantized tonic, (2) setting the first vocal entrance with the dominantized tonic following a piano introduction, (3) ending the vocal melody on the dominantized tonic prior to the final bar of a song, and (4) concluding an entire song on an altered tonic sonority, prepared with a dominantized tonic. Although one may simply regard many of these altered tonic harmonies as V7/IV and stop there, doing so ignores the extravagance of their structural and expressive effect, especially when used at the outset of a work.

Some Perfect Authentic Cadences are More Perfect than Others
Poundie L. Burstein (The Graduate Center, CUNY)

Modern music theory tends to class all perfect authentic cadences (PACs) within the same basic category. Eighteenth-century theorists, on the other hand, treated PACs in a far more varied and nuanced manner, in a manner that has deep implications for analysis and performance. Accordingly, these theorists differentiated (1) PACs that might serve as the formal cadence (*förmliche Cadenz*) that could effectively conclude an entire movement; (2) PACs that could mark the formal cadence that ends a mid-movement *Periode* (a large, multi-phrase section); and (3) PACs that are better suited for the conclusion of a *Grundabsatz* (a mid-*Periode* resting point over a tonic harmony that does not establish a formal cadence). Adopting this more flexible attitude toward the PAC suggests various provocative interpretations—touching on both small-scale and large-scale matters—that diverge from what is typical of many modern approaches.

Synthesizing the Tonal and Rhetorical Dramas of
Franz Clement's D-Minor Violin Concerto
Tim Cutler and Sam Bivens (Cleveland Institute of Music)

In recent years and with great enthusiasm, theorists of various analytical persuasions have aimed to understand non-normative compositional strategies within sonata-form movements. While many of these studies focus on classical music's most renowned composers, the rise of online digital resources has provided opportunities to spotlight unusual practices in the works of lesser-known composers. Franz Clement's Violin Concerto in D minor (c. 1810) is one such composition. Clement (1780–1842), best remembered as the commissioner, dedicatee, and first performer of Beethoven's Violin Concerto, crafted a first-movement key scheme whose uniqueness rivals that of any sonata-form composition in the tonal literature: within the shell of a traditional Type-5 sonata in D minor, an S candidate is set in the major supertonic (E major), an EEC candidate appears in a chromatic submediant (B minor), and Clement recapitulates this music in C-sharp major. And the chromatic and tonal surprises do not end there.

Our poster demonstrates that Clement's unusual tonal plan pushes mainstream analytical approaches—namely Sonata Theory and Schenkerian analysis—to their limits. While Clement's radical tonal maneuvers present different challenges to both systems of analysis, our two-pronged approach yields the same conclusions: (1) the first movement produces friction between its surface rhetoric, tonal rhetoric, and tonal structure; and (2) the first movement forms a compelling narrative that is represented on multiple levels of musical structure.

Phrase-Rhythmic Norms in Classical Expositions:
A Corpus Study of Haydn's and Mozart's Piano Sonatas
Joseph Chi-Sing Siu (University of Maryland Baltimore County)

Recent research in phrase rhythm and hypermeter have found that some phrase-rhythmic patterns, such as the end-accented "closing-theme schema," appear regularly in certain parts of the Classical sonata exposition. These phrase-rhythmic norms can, therefore, be regarded as the first-level defaults according to the compositional preference hierarchy in Sonata Theory. However, besides the closing-theme schema, there has been no systematic study to examine the phrase-rhythmic norms in the other locations of the sonata exposition. Therefore, this study aims to fill that research gap by conducting a corpus analysis of phrase-rhythmic usage in all the first-movement expositions of piano sonatas composed by Haydn and Mozart. This corpus study can then inform our understanding of phrase-

rhythmic default levels in Classical sonata form as well as any individual differences in the compositional styles of Haydn and Mozart.

In Haydn's and Mozart's piano sonatas, phrase rhythm in the primary themes are generally regular, while the secondary themes are mostly irregular. However, in the transitions, Haydn and Mozart have different first-level defaults: regular phrase rhythm occurs more often in Haydn's sonatas, whereas irregular phrase rhythm is the norm in Mozart. When irregular phrase rhythms do occur, Haydn's sonatas demonstrate a strong preference to focus on a single loosening device, non-quadruple hypermeasures, while Mozart's sonatas tend to also include the use of metrical reinterpretations and end-accented phrases. This study also reports on the phrase-rhythmic norms at the boundaries of the sonata formal sections and the hypermetric placements for the MCs, the dominant-locks, and the EECs.

The Medial Subphrase in the Eighteenth-Century Spanish Style: Characteristics, Function, and Variants
Bryan Stevens (University of North Texas)

Although the *presentation+continuation* model (Caplin 1998) describes many sentences in Viennese classicism, it is not universally employed by all eighteenth-century composers. In particular, this sentence model is rare to absent in late eighteenth-century Spanish keyboard music. Instead, Spanish themes either contain an independent medial subphrase that does not function as *continuation*, or otherwise these themes exclude medial function altogether and proceed directly from *presentation* to *cadence*. I argue that Spanish composers employ thematic types that differ from their Austro-Germanic counterparts, types that include among other distinctive features an optional medial subphrase characterized neither by *fragmentation* nor by *harmonic acceleration* or *sequential activity*. To this end, I propose revised thematic types, provide thematic data for Sebastian Albero (1722–1756), Manuel Blasco de Nebra (1750–1784), and Joaquin Montero (1740–1815) to show the prevalence of these types, and explicate these thematic types with specific examples.

ON ROTATIONAL FORM
Steven Vande Moortele (University of Toronto), Chair

"Rituals of Circularity": On the Conceptual Underpinnings of Rotational Form
Michael J. Puri (University of Virginia)

As defined by James Hepokoski in 1993, a rotation is an ordered series of musical elements through which a work or movement passes two or more times. Since its coinage the term has been widely discussed and applied in the analysis of Western music, but its conceptual underpinnings have not yet been explored.

I seek to shed light on these underpinnings by proposing that rotational theory springs from a conception of musical form as *ritual*. The layout of rotational form coincides with a conventional understanding of ritual structure, whereby the referential statement corresponds to the ritual's initial performance, and subsequent rotations to its repetition. Moreover, rotational theory's most distinctive features—including seriality, modeling, invariance, rule-governance, and spatiality (cf. the metaphors of circularity, "zones," "action-spaces," and "thresholds")—are those that theorists of ritual identify as typical of the phenomenon. Indeed, Hepokoski himself refers at one point to musical rotations as "rituals of circularity"—language that should not be taken lightly.

My argument divides into three sections. The first defines the rotation, traces its development as a concept within Hepokoski's publications, and summarizes its critique. The second argues for the importance of Northrop Frye and Mircea Eliade's writings on myth and ritual for rotational theory. The third identifies three topics—performativity, framing, and *habitus*—that Hepokoski's work shares with recent theories of ritual. Building upon this work, I conclude by proposing a theory of musical *formativity*: the propensity for music, as a structure of ritualized (virtual) habitation, to form cultural subjects.

Formal Process as Reanimation of the Past in Enrique Granados's "Epílogo: Serenate del Espectro"
Audrey Jane Slote (University of Chicago)

Goyescas, the programmatic suite for solo piano by Enrique Granados, encompasses a love story between *maja* and *majo,* stock characters from Castilian folklore. Snippets of fanciful text explaining the story punctuate the score. In the final movement, "Epílogo: Serenate del Espectro," the *majo,* who has died, returns in ghostly form to serenade his lover. The music's structural underpinnings vivify this narrative turn. In its formal and motivic design, "Epílogo" renders the past audible in the musical present by multiple currents of transformation.

My analysis traces three transformative processes in "Epílogo:" quasi-rotational form and its structural deformation, motivic relationships across different narrative spaces, and the clarification of motivic identity. I first explore how a substantial formal rupture enacts a crossing-over into reminiscence. I then trace how earlier motives foreshadow the reemergence of the musical past. Finally, I identify how certain motives come to be associated with everyday objects, a process of "disenchantment" that retroactively highlights the objects' bewitchment. My reading draws upon concepts of teleological genesis and rotational form (Hepokoski 1993), voice (Abbate 1991), and temporal fusion (Kaplan 1996).

"Epílogo" encapsulates *Goyescas'* contribution to a turn-of-the-century cultural project in which Spanish artists aimed to determine a quintessential national ethos and to represent it through their work. With this project, I aim to contribute to scholarship focused on Spanish art music in the early twentieth century, a repertoire that is less well-represented than others in current music-theoretical discourse.

The Sonata-Fugue Hybrid in Haydn's Early Symphonies
Carl Burdick (University of Cincinnati College-Conservatory of Music)

Among Joseph Haydn's earliest symphonies are thirteen sonata-form movements that incorporate fugal techniques, including two finales that integrate sonata and fugue. I document three strategies Haydn devises in service of the sonata-fugue hybrid. The dialogue surrounding these strategies represents a formative stage for his most characteristic techniques.

The tension between fugue and sonata concerns expectations for formal continuity and the closing effect of cadences. Sonata form is in two parts delineated by cadential closure. On the other hand, fugue is continuous and should avoid conveying rest during its course. Formal expectations for fugue are otherwise flexible and enable it to adhere to the rotational process of sonata form. The sonata-fugue hybrid finales of Haydn's Symphonies no. 3 and 40 adopt fugal continuity by mitigating cadential closure, but also engage sonata form's characteristic rotational patterns.

These divergences fall outside the norms postulated by Hepokoski and Darcy (2006). Indeed, scholars

have criticized their portrayal of sonata form for marginalizing Haydn's music (Ludwig 2012, 2014; Miyake 2009). But the techniques Haydn employs in these hybrid movements are consistent with his contemporaneous works. These include strategies for starting the exposition and recapitulation. Additionally, the use of fugal techniques contributes to both monothematic and continuous expositional strategies and to recapitulatory revisions.

By integrating fugue into the sonata process, Haydn began to develop sonata-form procedures drawing on fugal techniques. Though some of these strategies fell into disuse, others became hallmarks of Haydn's sonata style and deserve a more prominent role in our narrative of sonata form.

MUSICAL EXPERIENCE IN TIME AND SPACE
Aaron Harcus (University of North Carolina at Chapel Hill), Chair

Conceptualizing Musical Narrative Space:
A "Phenomenological" Journey through Chopin's Nocturne in F-sharp Minor, op. 48/2
Dorian A. Mueller (University of Michigan)

In light of the assertion that "narrative comprehension closely correlates with an understanding of the spatial organization of the storyworld" (Alber 2016), scholars in contemporary literary theory consider narrative space to be a vital component of narrativity. While studies in music and narrative have focused extensively on the features of plot, action, agency, narration, and temporality (e.g. Almén 2008; Cone 1974; Hatten 1991, 2018; Maus 1991; Newcomb 1992; Klein 2004), the construct of narrative space has yet to be comprehensively theorized.

This paper begins to fill this gap by proposing a theoretical model of musical narrative space, one that draws parallels to how readers conceptualize fictional worlds in literature through "spatial frames," "story spaces," "narrative (story) worlds," and "lived spaces" (Ryan 2009; Alber 2016). I engage with these constructs alongside an adaption of David Lewin's (1986) p-model—a tool that captures the "phenomenological" experience of listening through a mapping of musical events perceived within multiple temporal contexts—to model the path of "musical spatial frames" encountered in Chopin's Nocturne in F-sharp Minor, op. 48/2. Through the construct of "narrative (story) worlds," I then conceptualize the latent musical worlds activated by a listener in the course of tracing this path. As I suggest, the process of constructing musical narrative space is largely determined by salient moments in the music that draw a listener's attention to the "here" and "now" of listening, and it is through experiencing shifting spatial perspectives that these spaces become narrativized.

Music Phenomenology in the Princeton School
Scott Gleason (Columbia University)

The oral history of music phenomenology in the United States tells us that it emerged in the early 1980s with writings by Judith Lochhead, Thomas Clifton, and, crucially, David Lewin's oft-cited 1986 article. Seemingly lost are the late 1960s and 1970s precedents for Lochhead, Clifton, and Lewin's work at Princeton University and published in the pages of *Perspectives of New Music*. This talk will uncover the style of writing, attention to listening and description, and the possibilities made available to music phenomenologists by the Princeton composer-theorists.

Recoverable from the Princeton School's phenomenological writings is the point that *through* description one comes to understand how the experiencing subject changes the objects of investigation; this is a feature of Benjamin Boretz's writings. Through analysis one creates *theory*, but

theory as the mindset or set of ideas through which one hears a span of music, a notion articulated by Joseph Dubiel. The result is an investigation into musical experience, but also musical "cognition" and even musical time. Hearing "in the moment" requires musical time to decelerate; hence in 1976 Boretz, for one, writes his piano piece, "('…my chart shines where the blue milks upset…')," in order that he may *undergo* the experiences he has composed, an idea noted by J. K. Randall. Phenomenological *method*, however, was downplayed as these musical thinkers moved away from musical discourse as a science.

As music phenomenology becomes a growing area of scholarship, a major fount of its discourse in North America requires re-examination

Music Analysis as Esoteric Activity: Viktor Zuckerkandl at Eranos
Daphne Tan (University of Toronto)

This paper examines two lectures delivered by theorist-philosopher Viktor Zuckerkandl (1896–1965) at the Eranos conferences. Established in 1933 under the influence of Carl Jung, Eranos has long been a site of esoteric thinking: scholars of religion and mythology, natural scientists, psychologists, philosophers, and members of the general public gather annually to discuss themes related to mysticism, the occult, and the irrational. I focus on Zuckerkandl's adaptation of specialist music-theoretical approaches for this multidisciplinary audience.

In "Die Tongestalt" (1960), Zuckerkandl seeks an understanding of music-as-*Gestaltung* (creation, design), illustrating how time unfolds at multiple hierarchical levels in Bach's *Well-Tempered Clavier*. Drawing on unpublished correspondence between Zuckerkandl and Eranos founder Olga Fröbe-Kapetyn, I show that Zuckerkandl viewed the *Tongestalt* as the source of human self-awareness (*Selbsterkenntnis*) and Heinrich Schenker's theory as the key to unlocking it. The presence of Schenker is surprising given Zuckerkandl's audience. It also points to an alternative reception of Schenker's ideas that has received scant attention, one in which problematic aspects are sanitized through a wash of metaphysics.

In the second lecture, "The Truth of the Dream and the Dream of Truth" (1963), Zuckerkandl suggests that musicians have ready access to a "third space" that resides between physical and mental worlds. Demonstrating with analyses of the *WTC* again, and with reference to Jung, Zuckerkandl attempts to bring his audience into this realm. I show how this is motivated by Zuckerkandl's overarching belief in a generally accessible "musical thinking" that exists in a separate realm from "mere logical thinking."

GARY KARPINSKI'S AURAL SKILLS ACQUISITION:
ITS INFLUENCE TWENTY YEARS POST-PUBLICATION
AND FUTURE DIRECTIONS
Cynthia I. Gonzales (Texas State University), Chair
Daniel Shanahan (The Ohio State University), Respondent

Twenty years after its publication, Gary Karpinski's *Aural Skills Acquisition: The Development of Listening, Reading, and Performing Skills in College-Level Musicians* (2000) remains the central text in the field of aural skills pedagogy. Its coverage is unmatched, addressing both listening and reading skills from the fundamental to the complex. Moreover, Karpinski synthesized relevant research in music perception and cognitive science with his own sensitive understanding of the aural skills classroom. As Nancy Rogers predicted (2001), Karpinski's *Aural Skills Acquisition* (*ASA*) has become "required reading for every teacher (and aspiring teacher) of aural skills."

In the 20th-anniversary year of publication, we honor the influence of this important text and begin the process of synthesizing post-*ASA* pedagogy scholarship and cognition research. This tripartite interactive session begins with a profile of contemporary aural skills instruction followed by lightning talks that summarize Karpinski's influence and update the research on listening skills, reading skills, and the cognition of aural skills. The session concludes with interactive, small-group workshops on topics raised throughout the session.

Post-*ASA* pedagogy scholarship has advanced Karpinski's insights further, developed new pedagogical techniques in line with research-based priorities, and, in some cases, moved in new directions. As yet, no comprehensive text has emerged to synthesize the two decades of advancements since *ASA's* publication in 2000. Session attendees will depart informed about the influence of *Aural Skills Acquisition* and the relevant cognition research since *ASA*, as well as with resources developed during the session and new pedagogical ideas to apply in their own teaching.

Gary Karpinski's *Aural Skills Acquisition*: Listening Skills
Timothy Chenette (Utah State University)

In one-line dictation, students must encode a fleeting auditory signal and interpret it in relation to a tonal and metrical context in light of norms of notation; in polyphonic and harmonic dictation, they must additionally parse multiple voices and consider norms of counterpoint, voice leading, and harmony. Addressing such complex tasks, Karpinski's (2000) greatest contribution to listening skills pedagogy is his emphasis on musicality. Over and over, Karpinski emphasizes the need to present music in realistic conditions, particularly avoiding key and meter cues and "atomistic" strategies such as isolated interval identification; in harmonic dictation, Karpinski urges instructors to avoid relatively unmusical four-part dictation followed by "harmonic looking," in favor of listening for the bass, intervals above the bass, and voice leading, in service of developing the ideal endpoint of "Gestalt" (holistic) listening.

I will survey how these perspectives have been synthesized in contemporary instruction, as well as how they have been taken in new directions by Urista (2016), Stevens (2017), de Clercq (2014), Sayrs (2019), and Chenette, et al. (2019), among others. In short, the foundation laid by Karpinski is still in place, and most research since ASA's publication has either developed his ideas in more detail or explored their cognitive foundations. I suggest some of the most promising areas for future study include further investigation into the role of stock patterns and music theoretical knowledge in chord identification, as well as further exploration into the ways instrument-based imagery and physical motion aid in all kinds of dictation.

Gary Karpinski's *Aural Skills Acquisition:* Sight Reading
Cynthia I. Gonzales (Texas State University)

In the lengthy *ASA* chapter titled "Sight Reading," Karpinski explores the complex network of skills and knowledge required to sight sing successfully, including vocal production, solmization, scales, intonation, visual tracking, metric and rhythmic thinking, harmonic thinking, and structural singing. This presentation will highlight recent research on two components of music reading: visual tracking and cross-modal competence.

Technological advances in the 21st-century allow increasingly refined studies of eye movement. Puurtinen (2018) reviews 15 studies since Goolsby's seminal 1994 publications on eye movement while music reading. Ocular motion alternates between fixations and saccades—the eyes mostly stopping to process the visual stimuli and the eyes shifting to the next fixation. Holmqvist, et al.,

(2015) propose that information is acquired only during fixations. The length of these fixations in milliseconds, as reported by various researchers, range from 200–400 ms to 500–700 ms.

Turcotte & Sala (2018) engaged EyeWorks software to record subjects' singing and eye movement. Pupil diameter and fixations reveal the cognitive load. Preliminary results suggest that their subjects fixate mostly on the initial measures of a sight singing excerpt.

Related to visual tracking, cross-modal competence reinterprets the familiar aphorism "seeing ears and hearing eyes." Drai-Zerbib and Baccino (2005, 2012, 2014) confirm that expert music readers' eye fixations and durations of those fixations are fewer and shorter than less competent musicians. Investigations of multiple modalities (vision, audiation, and motor processes) hold promising outcomes for aural skills instructors to develop and incorporate effective pedagogical methods.

Gary Karpinski's *Aural Skills Acquisition:* Cognition of Aural Skills
Leigh VanHandel (University of British Columbia)

Karpinski's *Aural Skills Acquisition* was grounded in the literature of music perception and cognition, which has exploded as a discipline in the last twenty years. *ASA* engaged cognition topics including attention, memory, simultaneous and parallel processing, and Gestalt psychology, and related them all to the pedagogy of aural skills. Since then, there have been numerous studies on these and other topics in cognitive science and music cognition, including key finding, statistical learning, application of psychoacoustic principles to voice leading, and more. In addition, the field of educational psychology has grown, advocating for pedagogical best practices that take into account recent research into how we learn, resulting in a wealth of knowledge and understanding of how cognition relates to learning in general. As Elizabeth Sayrs noticed at the 2019 Pedagogy into Practice conference, cognition (both music and otherwise) played a large role in the research presented at the conference, including the role of implicit and explicit learning on mental representations of auditory images, current research into absolute pitch, and how working memory and cognitive load relate to pedagogical approaches in the classroom.

This lightning talk will contextualize Karpinski's *Aural Skills Acquisition* in the cognition literature of the time, and will highlight recent music perception and music cognition scholarship that has refined the foundation that *Aural Skills Acquisition* established.

ANALYSIS OF MUSIC FOR DANCING
Chris Stover (Queensland Conservatorium, Griffith University), Chair

The Hidden Influencers of Jazz: An Analysis of Eddie Brown's BS Chorus
Brenna J. Langille (Montreal, QC)

The relationship between jazz music and dance stems all the way back to the origins of jazz itself (Harker 2008; Stearns 1994). In fact, in the swing era the two would be more easily understood as one combined artform (Harker 2008; Dodge 1995). Indeed, the oral histories of many of the jazz greats credit their own experiences and collaboration with dance as vital to their development as musicians as well as jazz music as a whole (Cole 1980; Harris 2019; Hentoff 1995; Stearns 1994). That said, vernacular jazz dance has lacked attention from jazz studies both in the pursuit of history and analysis (Harker 2008).

In this paper I shall approach this issue through providing an analysis of a tap routine, Eddie Brown's BS Chorus, and its relationship to two different jazz standards. Through analyzing a routine that is

intended to be performed to a variety of jazz pieces, we can observe how a percussion piece with its own form and set of musical expectations can interact with music that may run with, or counter, to these formal divisions, thus influencing the interpretation of the piece itself. As existing scholarship has pointed out, our reliance on harmonic and melodic relationships have often been favored over rhythmic and metric interpretations of the music (Hasty 1997). By analyzing tap, we can not only have a more historically-informed understanding of jazz as an artform, but also provide new approaches to understanding the rhythmic and metric structure of music.

Loving out Loud: Romantic Coupling in Early Sound Films (1928–1933)
Eric McKee (Penn State University)

Audiences of early Hollywood sound films found one scene particularly problematic: the love scene. The novelty of *hearing* two lovers confess their feelings, leading to a dramatic clinch and five-second kiss, made audiences squirm in their seats. The typical reaction, as reported in newspapers and entertainment publications, was uncontrollable laughter. Studios responded by developing and experimenting with a range of techniques aimed at suspending viewers' sense of disbelief and drawing them into the emotional undertones of the scene. By 1933 studios had developed a well-defined set of conventions for love scenes and audiences no longer complained. This paper seeks to better understand this transitional period in cinema history by answering the questions: why were early love scenes so devastatingly unsuccessful and how did Hollywood fix the problem?

A Corpus Study of Metric Dissonance in Salsa
Rebecca Simpson-Litke (University of Manitoba)

In my 2014 SMT paper, "Flipped and Broken Clave: Dancing Through Metric Ambiguities in Salsa Music," I provided an examination of some of the complex interactions that occur between salsa music and dance by focusing on the physical interpretation of specific types of metric ambiguities and disruptions. In particular, I explored both grouping and displacement dissonances (resulting from flipping, breaking, or pausing the clave) and showed how the nature of the dancers' responses to these metric disruptions depends heavily on the specific features of each unique musical context. I begin this paper by reviewing these ideas through live demonstrations, audience participation, and dance video illustrations. I then build on my previous case-based research by providing a broader corpus analysis of salsa music in order to show how prevalent these types of metric disruptions are in the genre as a whole, noting how displacement dissonances are relatively prevalent while grouping dissonances are considerably rarer. I also show where instances of metric ambiguity tend to be placed in relation to the formal structure of a typical salsa song, and how these disruptions play an important role in defining the characteristics of particular time periods, specific artists' output, and the geographically-based styles of salsa music and dance.

Pulse Dissonance in Colombian *Currulao*
Lina Sofia Tabak (The Graduate Center, CUNY)

As a percussion-heavy practice featuring polymeter and a multitude of complex rhythmic ostinati and improvisations, Afro-Colombian *currulao* lends itself well to music-theoretical study. This talk will explore some of those rhythmic patterns that feature extreme metrical dissonances beyond those considered in *Fantasy Pieces* (Krebs 1999). Not only does *currulao* feature both displacement and grouping dissonances simultaneously in its fundamental groove, but the polymeter involved between

two of the metrical layers requires the introduction of a *pulse dissonance* model in order to account for the prevalence of contrasting pulses.

The case study piece, "Adiós Guapi," performed by Grupo Naidy in their album *Arriba Suena Marimba!* (2006), contains rhythmic and metrical elements representative of *currulao*. This presentation will use existing metrical dissonance models and extensions to explain some of the piece's rhythmic intricacies. I will demonstrate how the interlocking rhythmic elements are taught by some native musicians—a pedagogical perspective which encourages a polymetric interpretation of the practice. This paper will also consider how the contrasting pulses might be perceived by the musicians, listeners, and dancers.

My hope for this contribution is not only to introduce underrepresented music to the scholarship, but also to suggest that the resulting newly expanded model might find applications across a much wider repertoire.

REDISCOVERING OPERA:
THE POLITICS OF FORM, SEMIOTICS, AND REPRESENTATION
Knar Abrahamyan (Yale University), Chair
Yayoi Uno Everett (University of Illinois at Chicago), Respondent

Published over three decades ago, *Analyzing Opera: Verdi and Wagner* (Abbate & Parker 1989) was seminal in two regards: first, it disputed the Germanocentrism of the "common practice" canon by treating an Italian composer's music with due analytic rigor; second, it challenged the notion that texted music is inferior to absolute music due to its lack of musical autonomy. Although one would be hard-pressed today to find music theorists who would deny the importance of opera in contemporary scholarship, recent publications on this genre are still mostly centered on German and Italian works and still privilege questions on compositional process and technical aspects. Considering the political significance that opera has in music history, it is striking that music theory continues to neglect the ways in which opera's self-contained musical structure engages with its local cultures, social practices, and historical realities.

In the spirit of the few recent studies which interweave music analysis and social context (Johnson 2011; Everett 2015; Edwards 2017), the presenters in this session turn to extra-musical concerns in three distinct cultural contexts. Each paper treats cultural frameworks as integrally woven into the music-analytical techniques that are being implemented by composers, cognized by historical audiences, and examined by contemporary analysts. Specifically, the three papers pair music semiotics with social status, operatic topoi with representation, and form with class struggle. They do so to illustrate the uniqueness of opera as a genre that resists a methodological distinction between purely formalistic and cultural-studies inquiries.

The (Attempted) Subversion of Dissonance in Opera by the First Empire
Calvin Peck (Indiana University Bloomington)

Several scholars have acknowledged to varying degrees the associations between music and social class born from the French Directory (c. 1795–1799), in which the dissonant "noise" from popular, contemporary opéra-comiques became associated with violent Republicanism by counterrevolutionaries. "Melodic" music grounded in simple, diatonic harmony was by contrast described as embodying refined, noble, qualities. This paper explicates the motivations concerning how and why this semiotic network was maintained by the First Empire. Personal correspondence reveals that Napoleon and his high-level bureaucrats internalized this network when referencing both music and political affairs. These musico-political associations were also dispersed into the public

consciousness by the state-surveyed press. Critic for the *Journal de l'Empire*, Julien-Louis Geoffroy, was recognized by the public as the aesthetic voice of the Empire. "Noisy" music was considered a product of both an uneducated *parterre* borne from the Revolution and an invasive influence by German music, and supporters of the Revolutionary style attacked Geoffroy and his peers as representatives of an elitist class who refused to recognize the value in the technical progress of musical techniques. By comparing excerpts of operas by Etienne Méhul, Rodolphe Kreutzer, Antoine Reicha, and others with writings that reference these works, I will analyze and identify dissonant harmonic techniques that the Empire eventually relegated to the periphery of Parisian musical culture.

Secularizing Soviet Armenia: Enacting Power Dynamics through Operatic Topoi
Knar Abrahamyan (Yale University)

Soviet leadership attacked religion as the ideological enemy of the communist state by portraying it as antithetical to cultural modernization and economic progress. The fact that, by the time the Bolsheviks took power, Christianity had been part of Armenian culture for over 1600 years presented unique challenges to the dissemination of scientific atheism. Examining archival materials on Armen Tigranyan's *Davit Bek* (1950), this paper argues that the revisions of this opera contributed to the secularization of its initial libretto. Tigranyan's opera narrates the events of Armenian liberation from Persian subjugation in the early 1720s but, in several scenes, crucially diverges from Raffi's eponymous novel. These divergences, musically carried out through familiar operatic topoi, construct alternative dynamics between Armenian, Georgian, Persian, and Russian political powers represented in the plot. One topos, *deus ex machina*, is utilized when Peter the Great's messenger descends upon the Armenian people in a scene that initially centered on liturgical prayer. Another set of topoi, orientalism, is employed to construct difference. Whereas traditionally orientalism highlights difference between the imperial West and the colonized East, here, this binary distinction is obscured for political reasons. Even though Armenians, Georgians, and Persians geographically represent the East, Persia was an imperial rival to Russia and, as such, had to be orientalized, or "othered." Disentangling musical representations of the different nations, this paper illustrates how these representations perpetuated ideological goals, above all, the construction of a secular Armenian nationalism in which Russia's role is reconfigured from a colonizer to a delivering God.

Sounding Chosŏn: Form and Class Struggle in North Korea's *Sea of Blood*
Stephen Johnson (Eastman School of Music)

In the 1970s, as North Korea prepared General Kim Il Sung's 60th birthday festivities, his son, Kim Jong Il, commissioned five revolutionary operas. The younger Kim claimed these operas heralded a new era of music to suit revolutionary times. Recent studies by scholars such as Suk-Young Kim, Alzo David-West, and Heonik Kwon and Byung-Ho Chung have examined the political consequences of the operas' narratives with regards to national mythology and nation-building. I argue, however, that musical characteristics also constitute discursive arenas through which Kim and his creative workers asserted a Korean identity. Kim identifies such Korean music explicitly in his speeches, advocating for a "stanzaic form" rooted in popular and folk traditions of the early twentieth century. While the form is simple to Western ears, it offers layers of political meaning that are key to the opera's work in North Korean society.

Such meaning emerges through a musical class struggle in the song "Here's An Idea" from the 1971 opera *Sea of Blood*. The scene enacts village leader Pyon's failed attempt to recruit laborer Ung Pal into the Japanese militia. Over the course of the action, Ung Pal's stanzaic song overwhelms Pyon's bourgeois music, foreshadowing the communist victory of the opera's finale. Form therefore

establishes through contrast a Korean musical identity that furthers regime efforts to nurture nationalist sentiment and class consciousness among North Korean citizens. Despite its apparent simplicity, stanzaic form grants insight into North Korean politics, just as politics deepens our understanding of stanzaic form.

SUNDAY, NOVEMBER 8

MICRORHYTHM AND DISPLACEMENT IN HIP-HOP AND FUNK
Anne Danielsen (University of Oslo), Chair

Functions of Microrhythm in Hip-Hop Flow
Ben Duinker (University of Toronto)

Microrhythm in hip-hop flow concerns the practice whereby an MC (rapper) inflects their flow rhythms on a miniscule scale not easily representable with standard musical notation—how far "ahead" or "behind" the beat they rap. Adams (2015) and Kautny (2015) position microrhythm as an integral part of hip-hop flow and Ohriner (2017, 2019) discusses it in greater detail.

This paper complements their work by surveying flow microrhythm across the broader hip-hop genre.

Through a corpus study of 160 Anglophone hip-hop songs released between 1979 and 2017, I identify three broad practices of flow microrhythm. *Swung microrhythm* subdivides the tactus unequally, similar to a common jazz drum timekeeping pattern. *Lagging microrhythm* refers to the patterned delay of flow rhythm in relation to the underlying instrumental or sampled beat. And *conversational microrhythm* pertains to flow performances that resemble rhythmic patterns idiomatic of spoken language. I use theoretical and notational concepts developed by Benadon (2006, 2009) and Ohriner (2019) to illustrate the extent to which a flow performance involves these microrhythmic practices. I propose analytical methods for these practices that highlight their functional and rhetorical appeal. My analyses of flow performances consider microrhythm in light of Signifyin(g) and toasting in African American music (Floyd 2002), groove-based expressive microrhythm (Iyer 2002), and Afrocentric models of rhetoric (Jackson 1995). In doing so, I aim to further research on hip-hop flow by contextualizing microrhythm as a fundamental aspect of Afro-diasporic musical expression.

The Role of Beat Two in Funky Grooves
Michael Bruschi (Yale University)

Much scholarship on the funk groove centers on the concept of "the 'One,'" which Anne Danielsen (quoting James Brown) memorably characterizes as a "downbeat, in anticipation." But what exactly does this downbeat anticipate? I posit a commonsense answer—beat two. I propose a reframing of scholarly attention from "the 'One'" to "the 'Two'" on two interrelated grounds: (1) the onset of beat two, as a jumping-off point for the complexities of the groove texture, acts as arguably the strongest "attentional peak" (London 2004) in a typical funk groove; and because of this, (2) it can be characterized as the unique location within the measure that is vectored most palpably in a single direction. This is to say, if "the 'One'" is somehow both downbeat and anticipation, gesturing simultaneously onwards and backwards, then "the 'Two'" often gestures distinctively and unambiguously in just one direction—forwards. My notion of "the 'Two'" as "jumping-off point" combines insights from Nicole Biamonte and Yonatan Malin in conceiving of beat two as a "higher-level displacement consonance." This fuses Biamonte's idea of the drum backbeat as "displacement consonance" with Malin's remarks about the emergence of independent metric hierarchies in the face of sustained displacement dissonances. I frame the consonance of "the 'Two'" in expectational terms: this is the juncture where one's expectation of impending syncopation and cross-rhythm rises to a local maximum. I then discuss some musical examples in which the forward-directed impulse imparted by "the 'Two'" is most clearly on display.

Metric Feel and Form in "Superstition": Analyzing Stevie Wonder's Beat "Pockets"
Fred Hosken (Northwestern University)

Stevie Wonder's "Superstition" has become a stalwart of the groove-experience research literature, but the fine details of the performance remain underanalyzed. Previous investigations touch upon metric factors, though are mostly confined to the song's Introduction. This paper analyzes the construction of the metrical beat throughout Stevie Wonder's "Superstition" utilizing a theory of "pockets" of time that vary in size and shape to understand the effect of performed meter on the perceived intensity of sections.

According to my theory of pockets, which builds on Danielsen's "beat bins" (2006, 2010, 2018), beats are spans of time during which an onset may be heard as being part of "the beat." These spans are shaped so events falling at different points in the span are more or less likely to be categorized as being the beat, contra the in/out categorization of beats-as-instantaneous-points. Formalizing this concept using probabilistic distributions over the beat-spans, I explore the *qualitative* effects of these extended beats and consider how the "tight" or "loose" construction of the beat can enhance the "feel" of a section. I argue that changes in the shape of the pocket can influence our experience of musical form, illustrating this by analyzing form and timing in "Superstition" using Music Information Retrieval techniques and exploring the consequences of different pocket sizes and shapes for the track's "feel." Overall, this paper reframes questions of microtiming towards appreciating the subtle ways performers shape musical time in terms that capture the qualitative listener experience.

HISTORY OF THEORY
Maryam A. Moshaver (University of Alberta), Chair

Where Zarlino Got His Listener
Russell O'Rourke (New York, NY)

This paper reconsiders the origins and significance of Gioseffo Zarlino's listener concept, or *Soggetto ben disposto* (well-disposed subject), which the theorist introduces in Part II, Chapter 7, of *Le istitutioni harmoniche* (1558) as one of four ingredients necessary for moving the emotions through music. Pace Moreno (2004), who dismisses the *Soggetto ben disposto* as both theoretically shallow and "ancillary" to Zarlino's larger project, I demonstrate that this concept in fact stems from a rich theoretical tradition around listening, albeit a nonmusical one—namely rhetoric. In particular, I argue that Zarlino lifted the conceptual scaffolding for his *Soggetto* from vernacular commentaries on Aristotle's Rhetoric. Bartolomeo Cavalcanti's *La retorica* (published in 1559, but drafted in the 1540s) is one candidate. In discussing the mental states of those "subjects ready to receive emotions" in rhetorical contexts, Cavalcanti adopts a vocabulary similar to Zarlino's. Most telling of the connection, both theorists maintain that listening subjects must be "prepared and disposed" (*preparati, e disposti*), or predisposed, to be moved.

Hitherto unacknowledged, the rhetorical foundations of Zarlino's listener have implications for his theory of music and emotions writ large (*Ist. harm.* II.7–9). Most importantly, the concept of emotional "predisposition" baked into Zarlino's *Soggetto ben disposto* finds complementary expression in the theorist's account of how different kinds of music stimulate different emotional responses. Hardly ancillary, then, Zarlino's listener concept and its rhetorical origins open up new avenues for research and counter the notion that Zarlino always subordinates sensation to the numerical verities of *musica speculativa*.

"In which it is evident that perception is always deceived": Pythagorean Rationality and Descartes' "Clear and Distinct Ideas"

David E. Cohen (Max Planck Institute for Empirical Aesthetics, Frankfurt am Main)

Descartes' early *Compendium of Music* begins by arguing that the senses can take "delight" only in objects which, because they exhibit simple proportional relations, are perceived "distinctly." Our minds, he holds, are inevitably deceived by proportions of excessive complexity, such as those involving irrational quantities, which "can in no way be perfectly known … to perception." Thus—as the eminent Descartes scholar Stephen Gaukroger has observed—right from the start we find Descartes treating as foundational a version of what will later, in his most celebrated and influential writings, constitute the epistemological foundation of the *Cogito*: those mental entities or events that he comes to call "clear and distinct" ideas or perceptions.

As I go on to show, much the same concern for clarity and simplicity—for immediate, effortless intellectual perspicuity—had for centuries before Descartes played an equally crucial role in precisely *this* domain of intellectual endeavor, the "Pythagorean," mathematical theory of music. In discussing these points, I focus on the philosophical reasons why mathematical music theory—*unlike* geometry—from antiquity through early modernity had always rejected the irrational in favor exclusively of rational quantities, and had moreover sometimes regarded *as* "irrational" certain proportions that are in fact not so. I thus identify an idiosyncratic "Pythagorean" form of "rationality," whose lifespan extended from antiquity into at least the seventeenth century, when, transmuted by the alembic of Descartes' thought, it came to play an unlooked-for role in the foundation of modern philosophy.

Blinded by "Nature": Walter Young's "Essay on Rythmical Measures" (1790)

Carmel Raz (Max Planck Institute for Empirical Aesthetics, Frankfurt am Main)

A major development of earlier proto-cognitivist approaches to music, the "Essay on Rythmical Measures" (1790) by the Scottish cleric and musician Walter Young (1744–1814) anticipates several key tenets underlying psychological and music-theoretical understandings of rhythm of our own day. His goal in the Essay is to reveal exactly how our "rhythmical constitution"—the mental capacities and operations of the kind that are today studied in the field of music cognition—determines the rhythmic properties of works of music and poetry and contributes to our appreciation of them. Although the bulk of the work deals with the perception of musical rhythm, it also provides an account of poetic rhythm, and tries to reconcile reports of ancient Greek music and poetry with the shared cognitive principles which, in Young's view, hold across all times and places.

The Essay, I argue, represents an early attempt to link universal principles of cognition to the form and reception of cultural productions. As is particularly evident in his conjectural history of ancient Greek musical rhythm, Young's fervent commitment to the establishment of universal features of perception rendered him blind to his own biases and assumptions, which were firmly anchored in the music of his day. He thus represents a particular kind of response to the larger problem of universalism and relativism, one that continues to resonate with debates in psychology and music cognition today.

TRANSFORMATIONAL AND SERIAL TECHNIQUES POSTER SESSION
Richard Cohn (Yale University), Chair

N-dimensional Ski-hill Graphs and Complex Meters
Kája Lill (University of Michigan)

Most rhythm and meter scholarship that addresses complex meters—meters that include quintuple and larger prime number pulse groupings—examines individual complex meters in isolation, like Justin London (2002) and Godfried Toussaint (2013). Some authors, like Fernando Benadon (2004) and Mark Gotham (2015), have begun to consider how different complex meters relate to one another. I contribute to this topic with a novel analytical method that synthesizes Gotham's metric relationships and Benadon's description of tempo- (metric-)modulation into a single graphical representation of complex meters. To do this, I build on the work of Richard Cohn (2001), Scott Murphy (2009), and Daphne Leong (2007) on ski-hill graphs—graphic representations of simple and compound meters that import analytical possibilities from the *Tonnetz* into the metrical realm—by expanding them from 2- to n-dimensions. N-dimensional ski-hill graphs are ideally suited for analyzing repertoire comprising changing complex meters and especially cases of tempo-modulation by providing succinct graphic representations of those meters and highlighting relationships that otherwise remain opaque. This poster first shows how I generalize Cohn's 2-dimensional ski-hill graphs, which feature subdivisions by two or three, to account for subdivision by prime numbers larger than two or three. It then shows that by expanding ski-hill graphs into n-dimensions they can account for any number of prime number subdivisions. For demonstration, I provide analyses of complex meters utilizing 2-, 3-, and 4-dimensional ski-hill graphs respectively in Gustav Holst's "Mars, The Bringer of War," Elliot Carter's Cello Sonata, and Leoš Janáček's "Fanfare" from his *Sinfonietta*.

Reconsidering Negative Harmony:
Melodic Dualism in Bárdos' Scalar Schemata
M.A. Coury-Hall (New York City)

In this poster, we consider the unique mathematical transformation of pitches that preserves stability in the 7-tone scale systems identified by Hungarian music theorist Lajos Bárdos (1963). This transformation is referred to by several names in the literature including the popular term Negative Harmony and has its modern roots in Ernst Levy's flawed work *A Theory of Harmony*. Although Levy's work has dubious status among music theorists, his concept of Negative Harmony has continued to capture the imagination of composers and improvisers (most recently in jazz with Herbie Hancock and Jacob Collier as popular promoters of the idea). We show that this concept, a modern extension of Oettingen and Riemann's concept of harmonic duality, which Riemann later notoriously reworked, can be used to construct the melodic Major/minor duality in the Bárdos collection of 7-tone scales, which includes the diatonic collection among other scales. Although a trailblazing theorist on this topic, Bárdos did not recognize the full mathematical and musical properties of this group and its structure-preserving properties. This poster seeks to fill a gap in the literature in the theory of these structures. We will show that the resulting melodic dualism (Cohn 2012) derived from a mathematical treatment of the transformation, in contrast with the harmonic dualism, and the technique's efficient voice-leading (Tymoczko 2011) with respect to verticalization and horizontalization (Yust 2018) warrants further investigation by music theorists, especially in the context of the Bárdos Collection, and deserves a rigorous treatment in mathematical music theory.

Schubert, Schoenberg, and Some Extensions to Cohn's SUM-Class System

David Orvek (Indiana University Bloomington)

This poster takes as its starting point Richard Cohn's "SUM-class system" described in his 1998 article, "Square Dances with Cubes." After observing the ways in which this system elucidates the underlying voice-leading consistency in a passage from Schubert's Violin Sonata in G minor, the SUM-class system is expanded through the use of Joseph Straus's generalized contextual transformations so as to be applicable for other set classes. This new generalized SUM-class system is used to show how passages from Schoenberg's *Pierrot lunaire* and *Das Buch der hängenden Gärten* exhibit voice-leading structures similar to those seen in the Schubert excerpt. A brief survey of SUM-class systems on other set classes follows, which reveals that several familiar conceptual structures such as the circle of fifths and the pitch classes themselves are actually simplified SUM-class systems. The extended SUM-class system described in this poster thus provides a new analytical tool for studying voice leading in non-triadic music and also suggests interesting parallels between triadic and non-triadic voice leading.

Mapping Schnittke's Sequences in Bonded Uniform Triadic Transformation Spaces

Lauren Hartburg (Florida State University)

Uniform Triadic Transformations (UTTs [Hook 2002]) may be used to generate three-dimensional voice-leading spaces that accommodate Alfred Schnittke's triadic language when tonal and twelve-tone systems fall short. Recent explorations of Schnittke's triadic music include Segall's PSM voice-leading spaces (2017) and Honarmand's aggregate and quasi-aggregate completion (2019). I propose that the compound transformation PRP used in Honarmand's analysis of Schnittke's Piano Sonata no. 1 is not necessary since each of these motions can be understood as a single application of the UTT $\langle -,3,2 \rangle$. In this study, I consider triadic passages from the first and third movements of Schnittke's Piano Sonata no. 1 that employ the UTT $\langle -,3,2 \rangle$. While the UTT $\langle -,3,2 \rangle$ is the *primary* measure of voice-leading proximity in these passages, I propose *secondary* measures of distance based on common tone retention and parsimonious voice leading. For the sake of this study, harmonies adhering to the secondary parameters of voice-leading are limited to P, L, R, S, L', and R' (Morris, 1998). Through its union with Neo-Riemannian operations, UTT $\langle -,3,2 \rangle$ space gains three-dimensional shape as every-other triad in the sequence "bonds" to a partner that is related by a secondary voice-leading measure. This bonding reveals a secondary UTT that can also be observed in a tile of the bonded-UTT space, constructed through the intersection of primary and secondary UTTs at 90° angles. These spaces are ideal for mapping Schnittke's harmonic progressions as they allow for "slippage" within a primary sequential pattern to closely related substitute harmonies belonging to the secondary UTT.

George Theophilus Walker: A Unique, African-American, Voice in Twelve-Tone Music

Jack Boss and Tim S. Pack
(University of Oregon)

The plenary session at the 2019 SMT, among other things, implored music theorists to expand our repertoire beyond the handful of white, male composers on whom we have focused for most of our history. It is possible to couple new repertoire with new ways of analyzing, but it is also fruitful to apply traditional analytic techniques to the music of underrepresented composers. In this way, we can comprehend how their music is similar to or different from composers in the canon by using the same "measuring stick" for both. Our poster applies traditional twelve-tone approaches, supported by observations about registral and rhythmic patterns, to the piano piece *Spatials* by African-American

composer George Walker. Row counting the piece reveals that Walker reiterates the same row form within each of its six variations, only changing forms between variations. Nevertheless, he finds his own ways to create balance between unity and diversity in *Spatials*. As the presentation will show in more detail, he creates a large arch form by progressing from statements of octatonic subsets of the row as contiguous row segments in the early variations, to presentations of the same small group of set classes as "secondary harmonies" (according to Hyde 1980) in the middle, and back to statements of the contiguous versions at the end. The poster will illustrate numerous ways in which Walker creates diverse intervallic, rhythmic, and registral structures from a unified set-class repertoire following this large arch, and shows himself to be a unique voice within twelve-tone music.

SALVATORE SCIARRINO'S NOVEL FORMS: ORGANIC IDEALS AND MULTILINEAR TEMPORALITIES
Orit Hilewicz (Eastman School of Music), Chair
Robert Hasegawa (McGill University), Respondent

Writing in 2001, David Osmond-Smith called Salvatore Sciarrino "one of the most distinctive (and widely imitated) voices of his generation." Sciarrino's prodigious output in the nearly two decades since has cemented his reputation as one of the new century's foremost composers. Scholars have been intrigued by the music's obsessive repetitions, carefully crafted *Gestalten,* and naturalistic approach to musical sounds, in addition to his well-documented compositional philosophy (Sciarrino 1998, 2001, 2004). This alternative-format session aims to promote music-theoretical engagement with Sciarrino's work and to encourage dialogue between European and North American discourses.

The three papers in this session share a thematic focus on form, temporality, and process. Christian Utz offers a corpus study of Sciarrino's unusual beginnings and endings, using perception-sensitive analytical methods (Deliège 2001; Utz 2016) to show how Sciarrino's temporal strategies combine linear and nonlinear aspects and reclaim holistic elements of the listening experience. Antares Boyle turns a microscope on Sciarrino's multivalent temporalities through analysis of a single piece, the 1999 piano concerto *Recitativo oscuro*. Mingyue Li interrogates Sciarrino's concept of "organic music" itself (Sciarrino 2013). With a methodology grounded in Clarke's (2005) ecological approach to musical listening, she argues that Sciarrino's musical processes, conceived in synthetic rather than analytic terms, are akin to natural phenomena.

Imperceptible Beginnings and Inescapable Endings:
Suspended and Enhanced Temporality in the Semanticized Form of Salvatore Sciarrino
Christian Utz (University of Music and Performing Arts Graz, University of Vienna)

A decisive feature of modernity in the temporal arts—in music in particular—might be seen in the challenge, suspension, or even abolition of conventional temporal functions. Such modernist concepts of suspended temporality ("non-linear time"), however, remain multiply cross-related to conventional concepts and qualities of time ("linear time," Kramer 1988, 20–65). This is exemplified by Salvatore Sciarrino's creative method which reconciles more conventional elements of discursive organicist design (processes of accumulation, multiplication, and transformation) with strategies of rupture and formal deterioriation ("little bang," "window form"). This unique mixing of "linear" and "non-linear" strategies is staged in a soundscape of mostly very low dynamics and reduced activity at the edge of silence, sensitizing the listener for minimal changes.

This paper introduces key strategies in Sciarrino's temporal form based on analytical investigations into various genres. Based on context- and perception sensitive analytical tools such as

morphosyntactic musical analysis (Utz 2016), imprints and prototypes (Deliège 2001), and formal association and categorization (Hanninen 2004), this corpus analysis forms the background of a discussion of relationship between beginnings and endings in relation to constellations of duration and density. While beginnings might be marked by unconventional topoi such as "in *medias res*," they frequently establish an almost imperceptible sonic ground. Endings, by contrast, are often marked by irregularities and signify impasses that prevent any further musical development. Such markedness emphasizing difference, open questions, and unresolved conflicts, make these beginnings and endings keys to an understanding of the composer's unique staging of reflexive musical form.

Gestural Time and *Grundgestalt* in Sciarrino's *Recitativo Oscuro*

Antares Boyle (Portland State University)

Sciarrino's writings describe a compositional philosophy that prizes multidimensionality and spatiotemporal discontinuity (1998, 2004). Yet his allegiance to teleology, physical metaphors, and "coincidences of the microcosm and macrocosm" (2004, 54) intimate an underlying unifying organicism. I analyze how these seemingly conflicting aesthetic priorities coexist within a single work, *Recitativo oscuro* (piano concerto, 1999), as the multiplicity of its temporal structuring serves as a counterweight to a motivically integrated, fractal construction.

Kramer (1973, 1988) and Lochhead (1979) distinguish between beginning/ending functions suggested by musical material's content and by its temporal position within a phrase or piece. Kramer's "gestural time" refers to perceptions generated by the former when they conflict with the "absolute time" of the latter (1988, 168–89). This multilinearity can occur when temporal functions implied by a segment's "sonic" (psychoacoustic) qualities, such as its intensity profile, consistently conflict with those implied by its "contextual" properties, such as its order position in a recurring series (Hanninen 2012; Boyle 2018). The opening piano solo of *Recitativo oscuro* is characterized by such conflict, first heard in microcosm in its opening gesture. As similar gestures accumulate to form longer segments and phrases, each mimics the original gesture's intensity profile, mirroring its Janus-faced temporal implications at ever higher formal levels. The opening gesture thus serves as the passage's *Grundgestalt,* providing both raw material for longer phrases and a blueprint for their shape. *Recitativo oscuro* demonstrates how Sciarrino manipulates intensity change and repetition at multiple formal levels to create a rich tapestry of temporal implications.

Through Chaos: Conceiving A New Organicism in the Music of Salvatore Sciarrino

Mingyue Li (University of Oxford)

When interpreting extra-musical referents, Sciarrino scholars often embrace an array of metaphors borrowed from the physical world ranging from natural, environmental matters to bodily, physio-psychological sensations. Marco Angius (2016), above all, compares Sciarrino's music as a whole to "a living organism." Arguably, the "ecology of music/listening"—a kernel of Sciarrino's musical poiesis—epitomizes a quasi-naturalist and sometimes naïve-seeming approach to expression and reception. This paper seeks to offer new perspectives on the music's affinity with the physical world that goes beyond surface- and local-formal levels. Through a formal-morphological and perception-sensitive account of the music of *Lohengrin* and *Studi per L'Intonazione del mare*, I try to elaborate on the notion of "organic music," opaquely articulated by the composer himself (Feneyrou 2013) as a search for a new type of post-tonal structural force.

Sciarrino's organicism, I suggest, pertains to a holistic aesthetics and Gestaltian thinking. In contrast to the slightly worn-out notion of musical organicism, Sciarrino's formal principles could be justified

by placing the core of the term anew within the broader view of chaos. Based on an ecological approach to the perception of musical meaning proposed by Eric Clarke (2005), this paper argues that points of correspondence could be made between the perception of sound organisation and some characteristic aspects of biological organisms (e.g. infinite variations of a prototype, self-organization, responding to stimuli) and of natural phenomena that are particularly studied within the framework of chaos theory (Madden 1999; Kramer 2016) (e.g., a complex event resulted from simple occurrences, fractal geometry, and intermittency).

SCHUBERT AND CHOPIN
Sam Ng (University of Cincinnati College-Conservatory of Music), Chair

(Hyper)metrical Games in Schubert's Early Piano Sonatas
Stephen Gomez-Peck (The Graduate Center, CUNY)

Near the end of his analysis of Franz Schubert's *Moment musical* in F minor, D. 780, no. 3, Arnold Feil (1986) describes the rhythmic and metrical activity in the piece as, "a kind of game played on many levels with musical-rhythmic figures." Feil's near-exclusive focus on rhythm and meter in an instrumental work of Schubert's puts him in the minority: explorations of rhythm and meter in this repertoire tend to be eclipsed by parameters such as harmony, form, and Beethoven's influence on Schubert. Yet numerous studies of rhythm and meter in the instrumental works of other 18th- and 19th-century composers have led to rich and exciting ways of understanding, hearing, and performing their music.

This paper places rhythm and meter at center stage in analyses of several of Schubert's early piano sonatas—those in F minor, D. 625; B major, D. 575; and E-flat major, D. 568—in an effort to stimulate considerations of rhythm and meter as a salient expressive feature in Schubert's instrumental music. Using Lerdahl and Jackendoff's (1983) metrical preference rules as my primary analytical framework, I argue that Schubert plays metrical and hypermetrical games by setting up metrical problems at the beginning of movements that lead to rhythmic drama, moments of metrical clarity, and moments of metrical confusion later in the piece. Three metrical games are discussed: (1) creating tension between possible beginning- and end-accented interpretations of themes, (2) obscuring or concealing notated barlines, and (3) odd-strong/even-strong switches.

Form-Functional Displacement in Schubert's Sonata Forms
Caitlin Martinkus (Virginia Tech)

Form-functional displacement in Schubert's sonata forms results from two complementary musical processes. The first, a "developmental" or "dramatic" episode, occurs when tonal and formal processes more typically associated with development sections—e.g., "core technique" comprising model-sequence, fragmentation, foreshortening, and thematic liquidation—in expositions or recapitulations. The second situation can be seen as the inverse: it comprises development sections that are "un-developmental" in their construction. Here we find thematic material treated as we might expect in expositions or recapitulations; in Schubert's idiom, this means processes of variation come to the fore. Such "variational" development sections have received comparatively little analytical attention, yet they are as important as developmental episodes in understanding the multifaceted role of functional displacement in Schubert's idiom.

My analyses of D. 887/i, D. 958/i, D. 959/i, and D. 960/i illustrate developmental episodes and variational developments. For example, in D. 959/i the subordinate theme complex exemplifies core

technique through the deployment of formal loosening devices, suggesting the beginning of the development section. Conversely, the development section is organized as a series of variations. Through an interrogation of form-functional displacement, this paper begins to address the rift between theory and Schubert's compositional practice. In my conclusion, I consider an alternative lens—that of formal expansion—to frame this phenomenon. Ultimately, the expanded proportions in Schubert's sonata forms problematize facile distinctions between interthematic functions, and require a reconfiguring of expectations surrounding the compositional possibilities available within a sonata form.

Analyzing Chopin's Fourth Ballade Through a Two-Dimensional Lens
David Falterman (Eastman School of Music)

Although our tools for analyzing variation or sonata forms on their own have become increasingly nuanced over the last two decades, methods for studying the interactions between the two have typically relied on customized analytical systems specially designed for specific composers or pieces (Ivanovitch 2010; Martinkus 2017). This paper develops an analytical system potentially applicable to *any* sonata-variation hybrid by generalizing Vande Moortele's (2009) "two-dimensional sonata form" and supplementing it with important contributions from Schmalfeldt (2011). I first reframe Vande Moortele's two dimensions as "sonata form" and "variation form," enabling me to apply his useful categories of "interpolated" and "double-functional" formal units to this music. In addition, more thoroughly integrating Schmalfeldt's becoming principle allows the two dimensions to more flexibly permeate one another. I then demonstrate the applicability of this generalized two-dimensional perspective through a detailed analysis of two crucial passages in Chopin's Fourth Piano Ballade, both of which incorporate techniques of retrospective reinterpretation across the dimensional divide of sonata and variation forms.

A fully generalized multi-dimensional approach would provide a dedicated analytical framework for studying pieces that combine any two (or more) formal types. Though a full treatment is beyond the scope of this paper, I conclude with some brief speculations about the potential of this approach in analyzing other hybrid formal types, such as sonata-rondo form.

SCHEMAS, FRAMES, AND PARADIGMS POSTER SESSION
Janna Saslaw (Loyola University New Orleans), Chair

Complicating the Modal Paradigm with the Music of William Byrd
Megan Kaes Long (Oberlin College & Conservatory)

This project develops a historically grounded model of pitch structure in the music of William Byrd, drawing on sixteenth-century music theory, recent research on sixteenth-century pitch frameworks, and analysis of computational data. The poster presents a subset of this data to argue for a model of tonal structure in Byrd's music rooted not in modality, but rather in solmization. I extracted key profiles from a digital corpus of Byrd's vocal and keyboard music, then performed cluster analyses to identify pieces with similar pitch content.

Many compositions cluster into mode-like groups. Byrd writes in two forms of minor resembling the Dorian and Aeolian collections. Pieces with a flat signature and D keynote appear in both groups, suggesting that signature and keynote are not consistently reliable indicators of pitch content. Instead, these paradigms differ because of flexibility built into English solmization. A scale ascending from D (D-E-F-G-A, or *la-mi-fa-sol-la*) may continue to either B♭ (*fa*) or B♮ (*mi*). Apparently modal clusters do

not necessarily imply pre-compositional modal planning; we might instead understand modality as an emergent property of other characteristics of sixteenth-century pitch structure.

Cluster analysis also highlights outlying works. Compositions with A keynotes and no signature divide into two groups with sharper and flatter orientations. Some multi-part compositions straddle these two groups. Typically, Byrd creates tonal contrast in multi-part works by changing the keynote. However, these findings reveal that Byrd also shifts orientation flatward or sharpward to create similar contrast. Again, these distinct paradigms reflect solmization's flexible treatment of B♭.

What Kind of Linear Theory is Schema Theory?
Gilad Rabinovitch (Florida State University)

Dialogs between schema theory (Gjerdingen 1988, 2007) and Schenkerian theory have been adversarial (e.g., Agawu 1991; Lester 1990; Proctor 1989). However, analysis using schemata creates pitch reductions, which has led to some recent studies on theoretical intersections (Froebe 2014; Schwab-Felisch 2014; Rohringer 2015). Gjerdingen rejects "Schenker's totalizing ideology of a transcendent tonality" and his German chauvinism (2007, 435) and describes the conventional schemata of eighteenth-century galant style. Moreover, in his central "*Il filo*" chapter, Gjerdingen models schema successions probabilistically, not based on an overarching linear of formal outline. Rabinovitch (2018) suggests that constraints on the organization of schemata within form (Byros 2015; Caplin 2015; Neuwirth 2020) might potentially lead to a reconstruction of *Urlinie*-like structures. Do typical schema successions within form lead to a somewhat consistent global linear model or to a variety of paths?

I examine this dilemma through a sample of 27 first reprises of two-reprise movements from the 1740s. Despite its variability, the un-hierarchized skeletal outline that emerges from the concatenation of schemata resembles somewhat Schenkerian assumptions regarding the linear organization of a sonata exposition. A first reprise is, of course, not a sonata exposition but rather its predecessor (Ratner 1980; Greenberg 2017). However, due to the tight constraints on schema successions in this decade, it is a productive case study for the resultant global linear structure. Poster attendees are invited to speculate along with the author on the interaction of local and global musical factors in this typically galant repertoire.

Spectral Fission in Barbershop Harmony
Jordan Lenchitz (Florida State University)

Why do barbershop chords "ring"? I argue that the best barbershop quartets produce "ringing" chords due to spectral fission, which I define as the perception of timbral upper partials as discrete pitches when they have enough amplitude to be separably audible and are prominent in their regions of the frequency spectrum. I apply two complementary computational models to recordings by two championship quartets—Vocal Spectrum and Ringmasters—to demonstrate how their "ringing" chords fulfill both the amplitude and prominence requirements of spectral fission and to highlight the relationships between chord spacing, intervallic content, and pitch perception. The first of these is a vowel-neutral predictive model of vocal timbre that identifies probable frequencies of maximal spectral overlap due to formant tuning and vertical just intonation. The second is an original digital signal processing script based on a rivalry model of spectral prominence that recursively compares amplitudes across frequencies using the Discrete Fourier Transform, yielding frequencies that represent candidates for spectral fission. Correspondences between my timbral model's predictions and my script's candidate frequencies provide an explanation for our aural experience of barbershop's

"ringing" chords. Ultimately, understanding the distinctive qualities of these chords—both as acoustical signals and as auditory percepts—has practical implications for composers and arrangers of this style and offers a new avenue of inquiry into other a cappella vocal repertoires.

Tracing Music Theory's (un)Shifting Frames:
A Natural Language Processing Approach

Tom Johnson (Skidmore College) and Megan Lavengood (George Mason University)

"What is music theory today?" The question is especially pertinent as SMT enters the 2020s. Major universities have de-emphasized theory coursework and national music societies have called for foundational curricular changes, all while decades-worth of music theory publications celebrate, admonish, or simply note the accelerating centrifugation of SMT's orbit.

To gauge professional music theory's evolution, this project applies natural processing (NLP) techniques to the entire corpus of *Music Theory Online* articles in order to investigate changes and constants of music theory's ideologies. We employ basic n-gram analysis, bag-of-words models, and word embeddings to analyze music theory's texts. For this poster, we focus on two main trends. First, we demonstrate the well-known broadening of music theory's focus. In particular, we show the diversification of repertoires and techniques by tracing their increased usage across articles appearing in *MTO*. Second, despite indices of progress, we find clear evidence of pernicious inequities especially when it comes to gender.

As a professional field in North America, music theory's decade was capped by two self-reflective moments: the landmark, critical SMT plenary session, and the public reaffirmation of values through a widely circulated open letter. Each grappled with the field's apparently sturdy ideologies and their inextricable link to the demographic homogeneity of the current field and of its foundational practitioners. In this poster, we lay out a methodology for interrogating these forces and proffer ideas for remedying them.

HISTORIES OF MUSIC PEDAGOGY:
TECHNIQUES, INSTITUTIONS, EPISTEMOLOGIES
**Lindsay Wright (University of Chicago), Benjamin Steege (Columbia University),
Fanny Gribenski (Max Planck Institute for the History of Science), Emily Dolan (Brown
University), Anicia Timberlake, Michael Weinstein-Reiman,
Joshua Navon (Columbia University)**

In recent years, musicologists have turned to music education as an object of historical study, illustrated by an uptick in dissertations, conferences, and articles addressing pedagogical topics. Inspired in part by contemporary efforts to rethink the curricular organization of music departments, an interest in the historical roots of our pedagogical present has opened up rich arenas of investigation that have thus far received little scholarly attention.

As historians of science have long recognized, pedagogy is essential to the production and circulation of skill and knowledge, and therefore to generating and sustaining expert communities. In this regard, music is no exception. Music pedagogy, like the musical practices that it makes possible, is subject to considerable historical and geographical variation. From this perspective, analyzing music pedagogy can help explain not only the reproduction of musical knowledge and practice, but also how novel modes of musicking, thinking, and feeling come into being. We suggest that analyzing pedagogical cultures will spur musicologists to expand the purview of music-historical inquiry and to rethink

established disciplinary problematics. These include the emergence of *Werktreue* as the dominant paradigm of musical performance during the late nineteenth century, discourses of the musical mind and body, and relationships among ideology, canon formation, and musical institutions. Relatedly, music education has functioned as a critical point of contact between musical practice and other ideological, epistemological, and technical formations, such as the human sciences and state-led projects of public reform.

Comprised of six position papers, this workshop takes stock of these developments, considering the potential conceptual, historiographical, and empirical problematics that this newfound interest in the history of music education may generate. Focusing on Chopin and Liszt, Michael Weinstein-Reiman examines the nineteenth-century piano étude in light of changing conceptualizations of touch and virtuosity, theorizing the genre as an artistic mediation of physiological and spiritualist notions of musical training. Fanny Gribenski analyzes the Paris Conservatory as a laboratory of our sonic modernity, focusing on how the institution promoted new acoustical standards during the midnineteenth century that continue to shape global soundscapes to this day. Joshua Navon discusses shifting modes of assessing human musicality in German music conservatories in the late nineteenth and early twentieth century. Beginning by suggesting that most modern music pedagogies are classic forms of what Bernard Stiegler has called psychopower, Benjamin Steege questions the necessity of this status by turning to the case of early Dalcroze instructor Gustav Güldenstein, whose early career demonstrated an unusually critical stance toward psychological knowledge during the Weimar Republic. Taking up a tension at the core of James M. Trotter's 1878 treatise *Music and Some Highly Musical People* regarding the racialized nature of musicality, Lindsay Wright examines the historical relationship between music education, whiteness, and discourses of citizenship in the United States. Finally, examining body-based music pedagogies in the German Democratic Republic, Anicia Timberlake shows how abstract ideals such as "socialism" took on emotional, experiential meaning, and proposes a link between mature political citizenship and the process of learning to be musical.

GENDER, DISABILITY, POLITICS, AND POPULAR MUSIC
Karen Fournier (University of Michigan), Chair

Female-Fronted Death Metal: Expressing Alternative Femininities in Sound and Image
Lori Burns (University of Ottawa)

This paper examines the contributions of female vocalists to the extreme metal subgenre of death metal. Using case studies, I realize two research objectives: (1) to analyze the performance expression of female vocalists in death metal music videos; and (2) to complicate the conventional understanding of extreme gender subjectivities (hypermasculinity and hyperfemininity) in death metal. I examine how extreme vocalists navigate the discourse of death metal to express an alternative gendered subjectivity, analyzing their expression as a process of negotiation whereby the meanings and rules for gender are manipulated and transformed (Schippers 2007).

Recognizing the dearth of music analysis for extreme vocal expression (Smialek 2015), this study analyzes female metal singing in two music videos from the subgenres of melodic death metal and progressive death metal: Alissa White-Gluz (Arch Enemy), "The Eagle Flies Alone" (*Will to Power*, 2017); and Tatiana Schmailyuk (Jinjer), "Pit of Consciousness" (*Macro*, 2019). The expressive strategies that emerge in these examples challenge the hegemonic norms of metal. Adopting a cross-modal analytic framework for words, images, and music, my analysis yields data that places narrative and world-building content into interpretive dialogue with musical materials and expression. This paper

illustrates a systematic methodology for identifying cross-modal nuances (word-image-sound intersections) and interpreting the materials in relation to the concept of gender maneuvering in extreme metal. Ultimately, the selected vocalists are shown to articulate an alternative femininity through concrete effects that challenge norms of gender and genre.

Rhythmic Techniques in Signed Rap
Anabel Maler and Robert Komaniecki
(University of Iowa)

The art of "song signing" involves the use of rhythmicized signs from a signed language, such as American Sign Language (ASL), in a musical context. Song signing encompasses a variety of subgenres, including ASL hip-hop or "dip-hop," a term coined by Deaf rapper Wawa in 2005 (Best 2015–16, 73). A typical dip-hop performance involves a Deaf or hard-of-hearing artist simultaneously performing vocalized and signed rapping over a looped background beat. Although dip-hop began as a grassroots movement in the early 1990s (Best 2015–16, 71), it has received little analytical attention in the scholarly literature on hip-hop. In this paper, the authors combine techniques adapted from analyzing rhythm in non-signed rap music with techniques adapted from analyzing non-rapped signed songs (Maler 2013, 2015) to analyze the rhythmic flow of tracks by dip-hop artists Sean Forbes, Wawa, and Signmark.

Condit-Schultz (2016) states that "rap is made musical, as opposed to poetic, by its rhythm." Much of the current analytical literature on rap music reflects this sentiment by describing rhythmic paradigms in non-signed hip-hop (Adams 2009; Condit-Schultz 2016; Ohriner 2016; Komaniecki 2017). Dip-hop presents a unique format, however, as artists rhythmically convey lyrics in two distinct languages simultaneously.

In this paper, the authors demonstrate that dip-hop artists have developed genre-specific rhythmic paradigms and tropes to convey the periodicity and rhyme that are fundamental to rap music. Specifically, we address the alignment (or lack thereof) of rhythm and meter in signed and vocal rap and the conveyance of a repeated "beat" through rhythmic signing.

Abe Road: the Beatles in Linguistic Simulacrum as Political Parody in Japan
Noriko Manabe (Temple University)

In May 2009, Japanese rock star Kuwata Keisuke performed a parody of the Beatles' *Abbey Road* on his weekly television show. His Japanese lyrics criticized corruption in Japanese politics and commented on sociopolitical issues. Kuwata's parody was unusual because Japanese recording artists rarely engage in politics, due to broadcasting industry guidelines that disallow politically controversial lyrics. Furthermore, Kuwata presented the show as a "mishearing" of a beloved album: he sang Japanese lyrics that sounded remarkably like the original English ones—a difficult feat, given the phonetic and morphological differences between the languages. Using International Phonetic Alphabet charts, I demonstrate Kuwata's linguistic sleight of hand: he picked Japanese words with consonants and vowels that are phonetically similar to the English lyrics by type or place of articulation; he modified his pronunciation and contracted prosodic units to match the English sounds. He was particularly mindful to match or choose similar vowels and consonants on the stressed parts of musical phrases, e.g., onsets, (anticipated) downbeats, and cadences. He thus transformed "She Came In through the Bathroom Window" into a polemic against capital punishment and "Carry That Weight" into a contemplation of the debt crisis.

Abe Road illustrates the value of intertextuality in protest music: it captures attention, recalls cultural heroes, and makes political critique entertaining. Only by presenting his acrid commentary as a "cover" of this well-known album, aided by sophisticated manipulation of the Japanese language, was Kuwata, as a rock musician, able to criticize Japanese politicians on nationwide media.

VOICE LEADING SPACES AND TRANSFORMATION
Robert L. Wells (University of Mary Washington), Chair

Collection Space:
Systematizing Parsimonious Transformations in French Scalar Tonality
Matthew Kiple (Temple University)

The "scalar tonality" associated with the music of early twentieth-century Russian and French composers represents one path at a tonal crossroad, located at what Cohn (2012) posits as a third stage of tonal evolution. Analytical methods used to demystify this music focus on context rather than systemic pitch hierarchies, emphasizing harmony's additive rather than reductive properties. Most scholars demonstrate how collections such as whole-tone, octatonic, and acoustic, etc., supplant the diatonic collection as primary referential objects, but a comprehensive system of parsimonious transformations among referential collections has yet to be excavated. In lieu of such a system, I offer what I call "collection space"—a parsimonious intercardinal voice-leading space for maximally and nearly even sets—as a transformational space representative of Cohn's third tonal-evolutionary stage.

This paper is divided into three parts: (1) a rebuttal of criticisms toward graphical spaces of voice-leading relations among intercardinal multisets, (2) the construction of collection space as an exclusive network of parsimonious connections among maximally and nearly even collections of cardinalities four through eight, analogized with Cohn's pan-triadic and Tristan-genus systems, and (3) a demonstration with animated analyses of music by Fauré, Debussy, and Lili Boulanger, coordinated with live piano demonstrations. I also illustrate how collection space connects systemically to pan-triadic and Tristan-genus systems via what I call "pivotal subsets." My intention is to elucidate the abundance of possible voice-leading connections and harmonic juxtapositions characteristic of scalar-tonal French music, and to demonstrate how collection space reflects unequivocally this music's tonal iridescence.

Generic (Mod-7) Approaches to Chromatic Voice Leading
Leah Frederick (Oberlin College & Conservatory)

Recent extensions to Clough's (1979) diatonic set theory have adapted mathematical approaches to capture voice leading in mod-7 space. Although often used to describe diatonic progressions, these transformational and geometric systems are constructed from *generic pitch space*, meaning that each element in these spaces represents an entire equivalence class containing a letter name with *any* accidental attached. Any generic voice-leading structure can be interpreted as a chromatic progression by inflecting each generic chord with a different scalar collection; thus, chromatic voice leading is understood as two concurrent levels of voice leadings: one at the level of the generic structure and another at the level of the underlying scale.

This paper combines existing transformational and geometric tools for describing voice leadings between generic chords (Frederick 2018, 2019) with analogous approaches to scales (Hook 2008, 2011; Tymoczko 2004, 2011) to provide a new perspective on chromatic voice leading informed by diatonic set theory. Unlike the mod-12 neo-Riemannian approach, this mod-7 conception of chromatic voice

leading can efficiently describe both functional and non-functional chromatic relationships, as well as differentiate between enharmonically equivalent spellings of chromatic chords. This paper introduces the *chromatic voice-leading transformation group*, which acts on the infinite set of closed-position triads belonging to any diatonic collection. This system acts only on complete closed-position triads and diatonic collections; however, it is possible to capture similar information about the voice leading in progressions with non-triadic chords and non-diatonic scales using geometric techniques for both chords and scales.

Parsimony in Microtonal Music
Greg Hartmann (The Graduate Center, CUNY)

Parsimonious voice leading has been well studied for tonal music, but the existing literature defines parsimony in a way that severely limits its application to pitch-class spaces with a cardinality larger than 12. Instead of conceiving of parsimony as a minimal number of the smallest step in a given cardinality, we can consider allowing the equivalent of one standard whole step of voice leading motion (up to $1/6$ of an octave or $c/6$ steps in any cardinality c.) This prevents the motion from becoming imperceptibly small at higher cardinalities and allows for parsimonious trichords analogous to (037) in cardinalities that are not a multiple of three.

Following Straus's (2005) similarity measure for set-classes, I also construct a concept of fuzzy set-classes. This allows the comparison of set-classes in higher cardinalities with familiar set-classes (where $c = 12$) and allows the analyst to emphasize the similarity of two sets that may not belong to the same set-class.

The expanded application of these existing tools to this new repertoire not only allows us to more fully understand the voice leading structures in microtonal pieces, but also reveals parallels between techniques of microtonal composition and the more well-studied techniques of tonal composition. For instance, I demonstrate that it uncovers operations in microtonal music analogous to the familiar Neo-Riemannian P, L, and R operations. Overall, I show that an extension in the definition of parsimony reveals structures in microtonal music analogous to structures in tonal music.

THE PERIOD AND CYCLIC FORM IN THE NINETEENTH CENTURY
William Caplin (McGill University), Chair

Romantic Periods
Diego Cubero (University of North Texas)

This paper examines the transformation of the classical theme-type known as the period in the music of the first romantic generation. Whereas in classical periods the antecedent phrase is harmonically closed-off from the beginning of the consequent phrase, in romantic periods the end of the antecedent often connects with the beginning of the consequent to form a continuous harmonic progression. Voice-leading analyses illustrate three different ways through which the romantics joined the two phrases of a period. The most basic of these is by eliding the antecedent's closing dominant with a V-I progression at the beginning of the consequent. A related means is by prolonging the antecedent's closing dominant through the beginning of the consequent and then resolving it to a tonic triad. A more radical deformation involves ending the antecedent phrase on a predominant harmony and then continuing the motion from the predominant through a dominant to a tonic triad in the consequent phrase. By joining the end of the antecedent to the beginning of the consequent and forming a continuous progression, the romantics undermined the clear harmonic boundary that separates the

two phrases of a classical period. In so doing they transformed the period from a theme-type that epitomized the classical aesthetic of balance and clarity into one that manifested what Rothstein (2006) has described as the "the Romantic urge toward the boundless.

Periodically Asymmetrical:
On the Analytical Implications of an Expanded Antecedent
Xieyi (Abby) Zhang (Georgia State University)

Current-day discussions of expanded antecedent-consequent periods generally require some expansion to take place in the consequent; the possibility of an expanded antecedent followed by a consequent of standard length remains unaddressed. This new category subverts the period's usual phrase-rhythmic narrative, which typically interprets the consequent as operating from norms set by the antecedent. Instead, these standard consequents adopt a more active role in "fixing" the expanded antecedent's protracted length.

This paper examines periods in which an expanded antecedent comes before a standard consequent. Drawing primarily from Dvořák, a composer whose music contains many antecedent expansions, I begin by exploring three types of phrase expansions that may arise in the antecedent: an internal phrase expansion before the antecedent's cadence, a cadence-altering suffix, and a post-cadential extension. Following this exploration, I demonstrate the analytical possibilities of this phrase expansion using the opening movement of Dvořák's Wind Serenade.

Global Double Cycle and Damaged-Global Double Cycle as
Representations of Fate in Nineteenth-Century Opera
Levi Walls (University of North Texas)

In this paper, I expand upon the terminology surrounding David Lawton's concept of "double cycle"—a recurrent tonal structure within an opera that suggests a parallel between two parts of the narrative. A "global double cycle," as I call it, is a parallel between the structure of the first act and that of the opera as a whole. A background structure in the first act that grows to embody the entire composition serves as an eloquent representation of fate, which the pre-Socratic philosopher Heraclitus defined as the necessary conclusion brought about by a person's character. Consequently, nineteenth-century operas dealing with fate sometimes feature a character-building phase (the opening act) that structurally mirrors the culmination (the work as a whole). This compositional technique takes its cues from the wider world of literature, in which the presence of fate is often alluded to through a beginning-ending parallelism—for instance, a thematic connection between the first and last sentences of a novel. After illustrating what a global double cycle looks like—using *Les Troyens* (1858) by Hector Berlioz as an example—I will consider the semiotic capabilities of a would-be global double cycle that fails to materialize. A "*damaged*-global double cycle"—my proposed term for a cycle with a marked flaw—can serve as a representation of averted fate, as it does in *La Esmeralda* (1836) by Louise Bertin.

RETHINKING WHAT COUNTS IN SERIAL MUSIC
J. Daniel Jenkins (University of South Carolina), Chair

Virgin Mary, *Voce Interna*, Hystericized Body:
Simona Fabien's Melodic Disintegration in Dallapiccola's *Volo di notte* (1937–39)
Sabrina Clarke (West Chester University of Pennsylvania)

Scholars have explored Dallapiccola's formative use of twelve-tone technique, self-quotation, political subtext, and symbolism in his one-act opera *Volo di notte* (Earle 2013; Maier and Painter 2004; Fearn 1997; Shackelford 1987). However, the figure of Signora Fabien, wife of a doomed pilot and the sole individual to challenge airline director Rivière, remains largely neglected. This paper offers a new perspective on Simona Fabien as an agentic and redemptive figure. I demonstrate how Simona's melodic disintegration—from lyrical dodecaphony to repetitive chromaticism—signifies the reclaiming of the feminine body as an act of protest.

While some scholars view Simona as symbol of domestic love and sacrifice, I show how Simona's interaction with Rivière in scene four of the opera demonstrates the embodiment and voicing of hysteria as a radical act of redemption. Her evolution from penitence to heroic agency is evidenced by Dallapiccola's use of material from his *Tre laudi*, hymns to the Virgin Mary, and references to the *Voce interna,* the sensual soprano line from the opera's *Movimento di Blues*. As the *Voce interna* encroaches upon and displaces *Tre laudi* material, Simona's emotional anguish crescendos, her hysteria an act of defiance.

At the pinnacle of Simona's hysteria is the swift disintegration of melodic reprise; motives and phrases are attenuated, and pacing quickens through repetition of short, chromatic segments and unpredictable leaps. But Simona is not lost. Her hysteria leads to power through clairvoyance: she overtly predicts Rivière's fate and foreshadows her husband's death. Formidable and modern, Simona Fabien demands to be heard.

Stockhausen as Gender-Bender?
Serial Systems of Structure and Sex in the Opera Cycle *Licht*
Paul V. Miller (Duquesne University)

Most scholars understand Stockhausen's serial technique as one that essentially mitigates binaries. I argue that Stockhausen's representation of gender also inhabits ambiguous space in his operatic heptology *Licht*. This is surprising because at first glance it seems Stockhausen reinforced traditional gender stereotypes in the three Gestalt-protagonists Michael, Eve and Lucifer. Without question, Stockhausen gendered specific intervals in the tone-rows associated with the protagonists. More surprising, he claimed that by dismembering and reassembling this coded material, he could create "half-beings" [Halbwesen], "hermaphrodites" [Zwitter], and "people who become androgynous." These startling statements have been left uninterpreted by the Stockhausen community in the published literature. I begin to address this lacuna by analyzing serial mechanics in three pieces: *Xi, Elufa* and *Lichter-Wasser*, particularly with regard to ambiguities in serial order position and techniques of intermodulation. I conclude that questions of gender play a bigger role in Stockhausen's operas than is generally recognized, and suggest ways in which this discussion could continue, particularly if the net is cast more broadly to encompass costume, movement, and libretto.

Beyond its engagement with embodiment and temporality, this approach permits interpretations in terms of disability, musical forces, and concepts in technical timbre analysis. Most importantly, the

critique of the discrete apparatus of post-tonal theory takes seriously the concern with music as "characteristic gesture," "idealized dance," or more broadly, as something meant to happen *in time*.

THEORISTS TALK ABOUT SEX...IN MUSICALS
Michael Buchler and Rachel Lumsden, Co-chairs
(Florida State University)

This session offers analytic perspectives on musicals that blur and expand the traditional heterosexual paradigm, highlighting musical moments that are unexpected, unorthodox, and transformative. Three papers analyze ambiguous sexual subtexts: one paper discusses "hidden" references to sex, and two papers explore moments where a female character is ambivalent about conforming to the trappings of a heterosexual relationship. Three papers analyze musicals that foreground queer sexual relationships. One paper examines the different ways that sexual desire is depicted for gods and mortals in *Hadestown*. We will present a series of seven lightning talks. An overall organization by theoretical methodology (rather than by chronology, plot topics, or character themes) allows a rich network of cross-references between the seven papers to emerge. The papers feature a broad range of musicals that intersect and overlap with one another in compelling (and sometimes unexpected) ways: for example, three talks describe phrases in ways that derive from Caplin's sentential taxonomy, three involve feminist and/or queer theory, and three discuss topics and stylistic interplay (several of the seven talks fall into multiple categories).

The Waltz Topic and Aspects of Love in Broadway Shows after 1940
Greg Decker (Bowling Green State University)

The waltz has a special place in musicals that almost no other topic does: we know when we hear it that the subject, somehow in some way, has to do with love. Although waltzes do not have a monopoly on romance in musicals, the waltz's semiotics are complex enough for many different kinds of situations having to do with love, including comic and ironic uses. The waltz gained these topical associations from several sources: its use as a European and American social dance in the nineteenth and early twentieth centuries; the method of dancing itself, which involved a whirling motion while in close contact with one dancing partner; and its use in concert music, salon and parlor music, operetta, and, to some extent, music hall and vaudeville. In this talk, I will briefly substantiate these potential associations using a survey of over 200 popular songs and operetta numbers written between 1885 and 1930. I will then turn to some waltz numbers from later Broadway shows (after 1940–present) and examine the ways in which these associations have been manipulated to highlight different aspects of the topic's possible meanings and underpin a range of situations involving love, romance, and sex.

Torch Song Ternaries: Broadway Medleys as Reinterpretation
Nathan Beary Blustein (American University)

Music-analytical studies of songs from book musicals are generally work-centric. Such approaches prioritize musical meaning and interpretation through the dramatic context of a libretto, paralleling the critical valuation of the "integrated" musical. But musical theatre entertainment is considerably more varied than sitting down in a theatre for a live performance of a dramatic work. And for a canon that upholds stereotypes as much as it subverts them, performances that surpass the bounds established by mid-twentieth-century texts offer sites of potent and imaginative reengagement.

In this paper I examine one such category of performances, using Dorothy Loudon's "Losing My Mind/You Could Drive a Person Crazy" as a case study. Loudon's medley turns Stephen Sondheim's

pastiche of Tin Pan Alley pathos in *Follies* on its head by switching back and forth with a solo rendition of an Andrews Sisters-style trio about a flaky beau in *Company*. A close reading of musical form shows how her performance lampoons patriarchal conceptions of hysteria in both songs, reframing an explicitly sincere and sentimental lyric with surprise and irony.

Loudon's performance is part of a broader practice of subverting expectations of the *torch song*—"freighted with gender and sex coded meanings" (Hubbs 1996)—through juxtaposition, alternating two affectively opposed songs into a newly constructed ternary form. These performances most often happen in cabarets, recitals, and concerts—beyond the Broadway stage, where play with musical form is much more rigidly codified—providing a liberating space to confront theatrical stereotypes and animate intersectional subtexts.

Communism, Baptism, Canned Corn, and Other Salty Matters: Songs That Aren't about Sex (That Are Totally about Sex)
Michael Buchler (Florida State University)

Lusty songs, as opposed to love songs, are relatively rare in musical theater. When they occur, they're usually metaphorically valanced—and they're funny. This brief talk examines three songs, ostensibly *not* about sex, where the music, stage direction, and lyrical double entendres clarify the actual topic: "Sign Here" from *Flora, The Red Menace* (Kander and Ebb, 1965), "Baptize Me" from *Book of Mormon* (Stone, Parker, and Lopez, 2011), and "Jerry Likes My Corn" from *Grey Gardens* (Frankel and Wright, 2006).

Each song employs a different compositional and lyrical strategy to let us know that signing up for the Communist Party, getting baptized, and the way an old lady "does" her canned corn are not the real matters at hand in these not-so-demure theatrical songs about sex (by any other name).

Unraveling Uncertainty in Sondheim's Ladies
Richard J. Plotkin (BMI Musical Theatre Workshop)

Capturing specificity of character in song is crucially important when writing for musical theatre, and Sondheim's work, which is consistently specific, lends itself to careful study. Ballads of love, torch songs, and almost-love-songs take on unique qualities when affected by aspects of a character's gender and age. Sondheim's deliberate coordination of harmony, form, rhythm and rhyme combine to express in-the-moment revelations about his characters' moods and desires. There are two particularly illuminating examples of women struggling with their futures: "Losing My Mind" (*Follies*), sung by Sally for a love that has not materialized, and "On the Steps of the Palace" (*Into the Woods*), sung by Cinderella as she determines to change her awkward relationship with the prince. In the first example, we will examine how rhyme and harmony are manipulated to offer or deny closure. In the latter example, we will look more at the manipulation of form to express Cinderella's confused stream of ideas.

"Queer Temporalities" in *Fun Home*
Rachel Lumsden (Florida State University)

This paper examines depictions of lesbian desire in *Fun Home* (2015). Based on Alison Bechdel's eponymous graphic memoir, the musical chronicles Bechdel's emerging awareness of her lesbian identity and contrasts her eventual acceptance of her own sexuality with that of her closeted gay father, who commits suicide. I draw on Halberstam's (2005) conception of "queer temporality" to show how

the musical departs from conventional formal structures in its overall design and in two songs that directly address Alison's lesbian identity: "Ring of Keys" and "Changing My Major."

Desire in Hell: A Love Song That Transforms Gods and Men
Rachel Short (Shenandoah Conservatory)

Anaïs Mitchell's 2019 musical *Hadestown* is a complex intertwining of two mythic couples. The Greek god Hades is driven by love for his dissatisfied wife, Persephone. Their angst-ridden tale combines with the burgeoning romance of Eurydice and her lover Orpheus, a songwriter. Musicals with double couples commonly portray two different types of romance through different musical styles. In *Hadestown*'s portrayal of desire, music weaves the two couples together, turning the convention on its head. This paper traces varied uses of the shared "LaLa=Love" theme to explore how music develops the central ideas of desire and love as it transforms the stories of both mortals and gods.

The LaLa=Love theme is interwoven into eight different musical numbers, occurring in both duple and triple meter. It is set in relief by the surrounding folk-recitative narrative, sung in counterpoint against the worker's mechanistic chant, and—at a pivotal point in the drama—is sung by Orpheus to Hades, who eventually joins in. The theme is transformative for both couples, changing their paths and connecting their desires musically and dramatically. While the theme is mostly performed by Orpheus, he frequently sings it about Hades' passion. In a departure from many two-couple shows, all does not end well for the young lovers, but the older couple's love is given renewed hope. Tracing the LaLa=Love theme's introduction, metric changes, additions, and narrative arc helps us see how the music is changed by, and changes, both gods and men.

Tonality as Sexuality in *The Rocky Horror Show*
Nicole Biamonte (McGill University)

Tonal relationships, as well as musical style, reflect the characters' sexual relationships and transformations in the British camp musical *The Rocky Horror Show* (Richard O'Brien, 1973). The show is set in a dilapidated cinema and parodies science-fiction and horror movies: a bisexual, cross-dressing, alien, mad scientist—one of a trio of aliens from the planet Transsexual in the galaxy Transylvania—sexually preys on Earthlings and creates an idealized male lover for himself, evoking both *Pygmalion* and *Frankenstein*. The show's first six songs establish a clear tonal contrast between the innocent, conventional humans, who are introduced in flat keys and are the only ones to sing in minor keys, and the sexually aggressive, queer aliens, who are introduced in sharp keys. Changes in tonal areas also reflect the characters' transformations. The most dramatic of these is Janet's sexual awakening, depicted in "Touch-a, Touch Me" by a shift from the weakly defined A minor of the verse to A major in the chorus, a key associated with the Transylvanians and, by extension, with sexual agency. The pump-up modulation to B♭ major at the end of the song reflects her increasing excitement and also restores her opening key, suggesting that she has internalized this new sexual agency.

NEW PERSPECTIVES ON REFERENTS IN ANALYSES OF IMPROVISATION
Andrew Goldman (Indiana University Bloomington), Chair
Matthew W. Butterfield (Franklin & Marshall College), Respondent

What do we mean when we say an improvisation is based on something? The late music psychologist Jeff Pressing proposed the term "referent"—"an underlying formal scheme or guiding image specific to a given piece, used by the improviser to facilitate the generation and editing of improvised behavior on an intermediate time scale" (1984, 346)—to encompass the myriad musical and conceptual

structures underlying an improvisation. While Pressing initially characterized the referent as one input among many in a model of improvisers' cognitive processes, later scholars sought to retool the concept to address particularities of specific improvisatory styles as well as analytical perspectives. Notably, Michaelsen (2019) has discussed how referents act as interactional influences during improvisations, and Love (2017) recontextualized the term from the ecological perspective of "affordances." These attempts at retooling suggest that a critical reflection on the concept of the referent is in order. Are there aspects of the original definition that have disappeared in today's discourse? Does the instability of improvisation's work-concept, as discussed by music ontologists (Alperson 2016; Brown 2011; Gracyk 1996; Kania 2011), weaken (or strengthen) the legitimacy of the referent? How might the concept of the referent be updated to reflect new improvisatory techniques and music-theoretical models that came after its inception?

Recomposing the Referent: An Ecological Perspective
Marc Edward Hannaford (University of Michigan)

Jeff Pressing's original formulation of the referent encompasses many possible structures that undergird musicians' improvisations, including a theme, motive, mood, image, emotion, or social situation (1984, 346). Importantly, he states that *free improvisers* create their referent as the performance unfolds (346). Pressing additionally asserts that improvisers vary their "attitudes" to the referent, encompassing imitative, antagonistic, and independent stances (348). Free improvisers therefore continuously modulate their relationships to an unfolding, multifarious, and coauthored referent.

In this paper, I argue that the concept of affordances, borrowed from ecological psychology, furnishes a compelling analytical embodiment of Pressing's description. The concept of affordances helps characterize relational qualities between improvisers' sonic gestures and the unfolding referent. It embraces relations of similarity and contrast, and encompasses connections facilitated both by musical segments' theoretically defined parts and their "extra-musical" references.

Additionally, I offer a novel analytical methodology grounded in embodiment and recomposition. By playing along with a recording at the piano, stopping the recording immediately following a decisive juncture, and improvising various continuations, I explore various recomposed responses, ranging from the congruous to the incongruous and referring to multiple sonic and referential characteristics.

I employ both my ecological framework and embodied-recomposition methodology to discuss excerpts from two performances: "Focus, ThruTime…Time→," by Muhal Richard Abrams and Fred Anderson, and "Kasumi" by Ingrid Laubrock and Aki Takase. In both cases, the analyses demonstrate my analytical methodology, as well as compelling aspects of these performances.

Being Self-Referential
Garrett Michaelsen (University of Massachusetts Lowell)

While jazz improvisations are often based on melodies and repeating harmonic frameworks, many other materials make up the pre-improvisational structures on which an improvisation may be based. The late music psychologist Jeff Pressing coined the term "referent" to describe these materials: "an underlying formal scheme or guiding image specific to a given piece, used by the improviser to facilitate the generation and editing of improvised behavior on an intermediate time scale" (1984, 346). In previous work, I have construed the referent as a "domain" of musical interaction that "operates like an additional band member, influencing the utterances of the musicians throughout and occasionally being modified by the musicians' alterations or additions" (Michaelsen 2019, [26]). While this additional, invisible band member often takes the form of a set of musical structures, it sometimes

takes the form of a person. In this paper, I explore the ways in which Miles Davis often refers to himself—in the form of his own prior utterances—while performing. In doing so, Davis creates complex chains of influence from one performance to the next. I will focus on one particular and notable chain in Davis's recorded output: his existing recordings of the Tin-Pan-Alley standard "My Funny Valentine." In reflection of his idiosyncratic improvisational aesthetic, Davis expressly refers to his own customary way of playing a tune over any other version. His playing establishes a self-referent that is inextricable from his musical identity; Davis doesn't play "My Funny Valentine," he plays himself playing it.

The Problem of Invisible Transcribers: Towards a Materialist View of the Referent
Joon Park (University of Arkansas)

Recently, transcription YouTube channels have gained in popularity. These YouTubers monetize their transcriptions either through a membership platform Patreon or through direct sale of the notation. In doing so, the transcribers claim a role as co-creator by requesting a fair share for their labor, contrasting the previous ways musicians bought transcriptions. Current copyright law allows publishers to omit transcribers while highlighting the improviser's name on the cover, rendering the labor of transcription invisible. These YouTube channels, therefore, lay bare the publishers' interest in diminishing the labor of the transcribers by presenting the transcription as a mere change of the medium (from recording to notation) as well as the inadequacy of the copyright law.

In this paper, I argue that treating improvisation as an ideal object contributed to the problem of invisible transcribers. This idealist view of improvisation is inherent in Jeff Pressing's term "referents," which portrays an improvisation as a result of the improviser's interaction with ideal objects (e.g., a musical theme, a motive). An alternative is the "materialist view," where performance's documentation is itself considered as a creative act. I consider the recent theories of embodiment in music as a first step to situating improvisation within a materialist context. This investigation into an improviser's body and an instrument's physicality reveals the material dimensions of improvisation and proffers transcribers' interpretations in creating notations. This view erases the conceptual border around improvisation as the only manifestation of creativity and considers improvisation's dissemination as a continuation of creative instances.

Referents in the Palimpsests of Jazz:
Disentangling Tune from Improvisation in Recordings of Ellington
and Strayhorn's "Satin Doll"
Sean R. Smither (The Juilliard School)

Benjamin Givan has compared jazz improvisations to palimpsests, writing that improvised utterances "provide us with clues to the improviser's underlying conception" of the tune being played (2002, 41). The sounding music represents a negotiation between extemporization and fixed text wherein it is not always clear which elements are "part of the tune" and which are improvised. While recent research has sought to better understand both what a jazz tune is (Born 2005; Kane 2018) and how such tunes may be analyzed (Stover 2013), the palimpsests that are jazz improvisations continue to pose problems for analysts due to the dense entanglement of improvised utterances with the referents (Pressing 1984) that underlie them. In this paper, I take Givan's above observation as the starting point for a methodology that disentangles improvisations from the tunes with which they intersect.

I begin by outlining a theory of referent defaults, prototypical features grounded in a tune's performance network that represent an improviser's understanding of the musical structure of the

referent. Using nine recordings of Duke Ellington's "Satin Doll" as a case study, I show how various segments of the musical surface may be understood to convey referent defaults in varying degrees. By examining the interplay between referent and improvisation, we can better account for the tune as both an inspiration for and constraint upon the sounding music. This methodology reconfigures the objects of jazz analysis, suggesting new ways of understanding the relationship between improvisation and referent in jazz practice and beyond.

The Referent's Double
Michelle Yom (The Graduate Center, CUNY)

Jazz scholars generally agree that musical improvisation makes reference to preexisting schemas—these are collectively called "the referent." There are two prevalent ways of understanding the referent. In the *computational view*, the referent is a fixed object, unaffected by the improvisation (Pressing, 1984). In what I will call the *interactive view*, the referent is a living, evolving process that changes in response to the improvisation (Love, 2017). Both views, however, fail to take sufficient account of the role of the observer: the listener/theorist. In a close analysis of "period 2" in *Tree of Life* by Cecil Taylor, in which I will play the role of the observer, I will show that taking the observer into account complicates a stable notion of the referent due to the self-referentiality of the listener. In what I call the referent's double, the listener's innumerable references in the process of listening include the relationship of notation to sound, embodiment of gesture, emotion and affect as it is encoded in music, and the relationship of listening to analysis. I argue that factoring in the register of the listener, or the observer who makes sense of the music to nominate the factors from which to draw and theorize the referent, destabilizes the notion of the referent. Listening to improvisation, like improvisation, involves inter-referentiality inherent to any listening subject, including the music theorist.

STORIES FROM THE FRONTLINES
Sponsored by the Committee on Race and Ethnicity
Somangshu Mukherji (University of Michigan), Chair

Stifling Sameness: Hardships of Immigration, Parenthood, and Being Non-white Contingent Faculty
Adem Merter Birson (Hofstra University)

I had just returned to the United States from Turkey after only one year there amid the aftermath of a failed military coup in 2016. Many of my colleagues were jailed and my university was taken over by the government. As a scholar of Turkish and Puerto Rican descent, I felt connected to Turkey so much so that I took a position at a university in Ankara. Immediately upon my return to the U.S. came the election and subsequent "Muslim ban." While Turkey was not on the list of prohibited countries, I was attempting to bring my then-fiancée and anti-immigrant rhetoric was heating up. After two years of struggle with USCIS, we got married and now have a child. I eventually landed on my feet as an adjunct faculty at my current institution. However, being contingent faculty means struggling below the poverty level and without benefits. The difficulties of my full teaching load and working several jobs are prohibitive to maintaining a robust research program. Furthermore, as someone who studies both Western and Turkish music, it is the Turkish music that draws microaggressions in interviews, such as "It must be difficult to find instruments for an ensemble," or, "What is the audience for scholarship on that music?" This presentation uncovers the inequities that I have encountered within academia involving race/ethnicity and contingent faculty status.

Assessing My Market Value: One Perspective on Contingent Labor in Music Theory
Catrina S. Kim (University of North Carolina at Greensboro)

As the number of tenure-track jobs continues to fall, more ABDs and recent PhDs spend years as overworked and poorly compensated teachers. I discuss my lived experiences of contingent employment during the transition from graduate school to tenure-track employment; I focus on how administrators assessed my market value with respect to my racial and gender identities—among other factors—and on how the sedimented privileges and logics of higher education continue to fuel the exploitation of labor.

(Re)Visioning Race and Gender in Music Theory and Composition
Paula Grissom (Spelman College)

My presentation addresses the need for more inclusion of women, particularly Black women, in the fields of music theory and composition. By "(re)visioning" the role of women and their contributions in the fields of music theory and composition, we can begin to dismantle centuries of social and musical constructs endorsed by the traditional Western-European patriarchal canon.

Spelman College has a long-standing mission of educating women of color and preparing its students to be change agents in their communities. This mission also extends to the music department where we are "(re)visioning" our music curriculum that has historically promoted performance over other musical fields. By implementing curricula changes that promote more Black women to become music "creators" and composers, we are changing the narrative of Black women in music, while creating a new pool of music theorist/composers in the higher education workforce.

Negotiating and Nurturing Ethnicity, Social Justice, Stress, and Trauma, pre- and post-COVID, in an Urban Commuter College
Noé Dinnerstein (John Jay College of Criminal Justice, CUNY)

I have my own story: I am an ambiguous minority (basically I call myself a white Hispanic, never mind my indigenous ancestry). I am a very late return to academia (PhD 2013 when I turned 60), AND I am a survivor of the World Trade Center on 9/11, with significant PTSD.

I am honored and challenged as an adjunct at John Jay College of Criminal Justice, CUNY, where the enrolled student population is 47.8% Hispanic or Latino, 18.7% White, 17.7% Black or African American, 10.4% Asian, 1.59% Two or More Races, 0.351% American Indian or Alaska Native, and 0.263% Native Hawaiian or Other Pacific Islanders. Of these students, many are coming from socio-economically difficult circumstance, with far more challenges than middle-class students in residential colleges. The issues are: how do I nurture my students, and help them move forward? How do I use teaching of gen-ed classes in music appreciation and world music survey to present a de-colonized, anti-racist, anti-sexist, anti-ableist curriculum that engages and inspires my students, and allows them to integrate what they learn from me into their larger weltanschauung? At the same time, how do I not hurt myself through constant triggering of PTSD as I deal with real-life issues ranging from slavery to the Holocaust?

A Perspective from the Academic Labor Movement
Nazir Khan (Minnesota Higher Education Worker Center)

I will discuss the power and strategic necessity of solidarity to: (1) countering the for-profit business turn in higher education, and (2) enabling academic workers to rise to meet the challenges of a transforming society. It is solidarity between academic workers like contingent and tenure-line faculty; between students and faculty; among fast food workers, faculty, and students, that can truly turn the tide, as has been demonstrated in SEIU's Fight for 15 campaign, the Chicago Teachers Union progressively more powerful and groundbreaking strikes, and the great industrial unions of the CIO.

Fighting for Class Equality Through the Power of Collective Bargaining:
Toward Livable Working Conditions for Graduate Students in the Performing Arts
Anna Nelson (University of Michigan)

As graduate students, we've chosen a long and difficult path to stable employment in academia, but we should not accept living in poverty along the way. Unfortunately, issues of diversity and inclusion continue to underlie our compliance with this narrative of suffering for one's career. Through the lens of class inequality, common tropes about low wages and starvation can be seen to strike a painful chord for many students—especially those disproportionately affected by the financial strain of higher education.

In this talk, I seek to illuminate these issues by sharing my experience as a union organizer at the University of Michigan, focusing on an ongoing campaign toward higher fraction calculations for graduate employees at the School of Music, Theatre & Dance (SMTD). First, I share the story of the event that motivated me to commit to the work of the Graduate Employees' Organization (GEO). I then detail the fight for pay parity at SMTD, describing past conversations with administration, recent attempts to alter GEO contract language, and plans to continue to pursue equality in the performing arts. Finally, I consider the unjust power dynamic causing the mistreatment of contingent employees.

My work with GEO has taught me valuable lessons about allyship and intersections of race, ethnicity, and class in academia. We must strive for equitable working conditions for all because many of the issues facing early academics today can be distilled into one simple truth: not everyone can equally afford the exorbitant expenses incurred while pursuing a terminal degree.

Make Sure Your Own Mask is Secure before Assisting Others:
Contingent Faculty as Care Workers
Michael Berry (University of Washington)

Due to the precarious nature of our jobs, contingent faculty are more likely to be aware of and sympathetic to issues in the lives of our students that may be interfering with their ability to learn. Many of us have experienced (or are experiencing) housing or food insecurity, the challenges of balancing work and family lives, or a whole host of other issues. The nature of our work puts us in contact with a large number of students—many of whom are in their first or second year at the university—who may be facing challenges. We need to be prepared to help the students navigate the system(s) in order to access the resources they need. This becomes increasingly difficult if we ourselves don't have the resources that we need to do our jobs effectively. In this talk, I'll share some examples from my nine years as a part-time lecturer in the University of Washington system.

Extreme Adjuncting: When Contingent Labor Becomes the Norm
Reba Wissner (Columbus State University)

This paper discusses what will happen to the disciplines of music theory, music history, and ethnomusicology as contingent labor continues to become the norm. It will discuss my experience as someone who teaches many classes at multiple universities. It also considers the implications of contingent labor disproportionately affecting women-identifying scholars and scholars of color and how this will also affect what happens to these disciplines.

Navigating Academia, Single-Parenthood, and First-Gen Experiences
Patricia Hall (University of Michigan)

In this essay, I describe some of the challenges of being "first-gen" before the concept existed, as well as navigating academia as a single parent. My preparation for graduate school in music theory was also unusual, in that I had an undergraduate degree in psychology and was taking undergraduate courses in music theory while in graduate school. I emphasize the importance of mentors in this somewhat precarious environment.

MUSICAL INTERCULTURALITY: SCOPE, METHODS, APPROACHES
Anna Maria Busse Berger, Tobias Janz, Larry Witzleben, Philip Bohlman (University of Chicago), Martin Scherzinger (New York University), Christian Utz, John Winzenburg (Hong Kong Baptist University), Nancy Yunhwa Rao (Rutgers University), Yayoi Uno Everett (University of Illinois at Chicago)

Gender, racial, social, historical, and cultural biases surround research and teaching of music theory and music history in multiple ways. While many of these biases have been acknowledged for several decades and have given way to various critical traditions in our disciplines, the musical repertory of research projects, publications, and theory and history classes often remains restricted to works of Western, white, and classical canon. This panel discussion therefore aims at suggesting and scrutinizing ways of "decentering" research and teaching methods in the area of 20th- and 21st-century music. In the past 150 years, various processes of globalization, transnationalism, and hybridization have made the cultural origins, codes, and affordances of musics fluid and unstable as established tropes of musical exoticism or Orientalism have been increasingly rejected and challenged in musical composition and music practices. More specifically, such processes are reflected and transformed in certain trends of pre- and especially post-1945 art, popular, and traditional musics that have been described, among others, as examples of musical interculturality. By bringing together scholars from historical musicology/history, ethnomusicology, and music theory, the panel discussion shall result in proposals for current/future readjustments of research and curricular goals.

In order to frame the discussion, the participants will give short papers (10-15 minutes each) that explore the scope, methods, and approaches to musical interculturality, placing the focus on methodological and terminological questions within and across the disciplines of musicology, music theory/analysis, and ethnomusicology. These papers will be followed by 30 minutes of questions and answers.

Saturday, November 14

TEMPO, RHYTHM, AND GROOVE IN METAL MUSIC
Jose M. Garza, Jr. (Texas State University), Chair

Tempo, But For Whom? Rhythmic Parallax in Car Bomb's "Blackened Battery"
Calder Hannan (Columbia University)

The music of the math metal band Car Bomb gives rise to multiple, often incommensurate rhythmic realities for different listeners. I call this phenomenon "rhythmic parallax." Even basic rhythmic features—such as pulse and tactus—are often radically different depending on listeners' purposes. I explore four perspectives on various moments from the song "Blackened Battery," those of (1) a casual listener, (2) the band members while composing, (3) the band members while performing, and (4) a transcriber using software that measures the recording against clock time. Examining the different interpretations that arise from these perspectives provides a novel method for rhythmic analysis, one that cuts across habitual boundaries between metric analysis, microtiming analysis, and discussion of embodiment. I suggest that an analysis that focuses on rhythmic parallax reflects the difficulties, complexities, and apparent contradictions of music temporality.

How Much Math is in Math Rock?
Riffs, Progressive Rhythm, and Embodied Music Theory
Stephen Hudson (University of Richmond)

This paper explores embodied experiences of "metrical constructedness" (Macan 1997), using a new theoretical tool called "motional conceptual models" to analyze the motion experienced in progressive rock's riffs. Prog rock/metal is often associated with "mathematical" complexity of odd time signatures and polyrhythms. But this complexity rhetoric leaves some mysteries, including the use of such rhythms by non-prog bands; or Meshuggah's claim that "there is no mathematical approach" in their music; or online arguments about whether Metallica's …*And Justice For All* (*AJFA*, 1988) is "prog-influenced," when the album is mostly in duple meter and contains few polyrhythms.

Riffs are not just sequences of notes, but motions experienced by performers and listeners (Fast 2001). My "motional conceptual models" represent one experience of a riff's motion, framing that shape as a prototype category to explain how it can be recognized despite variations (see "conceptual models," Zbikowski 2002). These "motional conceptual models" show how manipulations of *riffs* can lead to manipulated *perceived motion*—providing a unified theory for "ABAC Additive Metrical Process" in Dream Theater (McCandless 2013), truncated riffs by Meshuggah (Pieslak 2007), Meshuggah riffs that begin "*in media res*" (Lucas 2018), and riff fragmentations I observe in Metallica's *AJFA*. Changes in riff shape can thus be perceived as interrupting the normal looping of meter, and this impression of artificial intervention is one possible explanation for Macan's "constructedness." This embodied cognition approach to riffs also demonstrates how it is possible to write rhythmically "progressive" rock and metal rhythms by feel, with no math required.

"Dance to the Dissonant Sway": Groove, Headbanging, and Entrainment in Extreme Metal
Guy Capuzzo (University of North Carolina at Greensboro)

Analytical studies of rhythm and meter in extreme metal stress the inseparable relation of musical content (repeated riffs or *grooves*) with the bodily motions of performers and fans (headbanging and/or moshing). To further analyze this relationship, this paper uses live performance videos and transcriptions of songs by Meshuggah and Animals as Leaders to illustrate how and why a single extreme metal groove can encourage and accommodate multiple modes of entrainment. I argue that these riffs create "targets for bodily motion" (Zbikowski 2004, 286) through (1) the interplay of grouping and meter and (2) the realization or denial of metric projections. To accomplish this, this paper synthesizes work on extreme metal (Hannan 2018; Lucas 2018; Pieslak 2007), grooves and embodiment (Cox 2011; Kozak 2018; Pressing 2002; Zbikowski 2004), and rhythm and meter (Lerdahl and Jackendoff 1983; Hasty 1997). The talk will demonstrate that the ability of extreme metal grooves to promote multiple modes of entrainment is an important stylistic marker, with ramifications that speak to broader issues in the study of music and movement.

BRAHMS AND BEETHOVEN
Frank Samarotto (Indiana University Bloomington), Chair

Musical Logic in the Slow Movement of Brahms's Second Symphony
Lucy Y. Liu (Illinois Wesleyan University)

In the history of Brahms reception, developing variation—both as technical procedure and as an aesthetic value—has shaped analytical discourse immensely. Except for Schoenberg's celebrated analysis of op. 51/2, slow movement, scholarship has focused on sonata-allegro movements, where motivic economy and apotheoses that "logically" flow from seemingly inexorable development are routinely praised. But outside the spotlight of first movements, one finds developing variation used for a different end: especially in slow movements, despite pervasive thematic unity and the presence of fully realized rotations, the sort of linear causality and logical entailment associated with typical sonata forms is bypassed in favor of a stream-of-consciousness rhetoric that surprises listeners at every turn.

Since this facet of developing variation has received less attention, I analyze the Adagio of the Second Symphony. Given its seamless, ever-evolving surface, how can we nevertheless account for the impression that initial ideas do not motivate/determine future events, that important formal/tonal arrivals and climaxes arise fortuitously? I focus on three passages: the opening 32 bars (P-TR), the lengthy retransition, and the much condensed recapitulation. Caplin and Schmalfeldt's formal-functional recontextualization is my primary tool for explaining how later rotations' partial, pared-down recalls of earlier material twist a cantabile—if troubled—opening into a tragic yet irresolute ending, at the same time showcasing Brahms's idiosyncratic handling of the rotational principle. In sum, I demonstrate how even within an environment of developing variation Brahms can consistently problematize continuation and thereby challenge reception history's simple unity/disunity binary.

Revealing the Secret: The Musical Uncanny and its Narrative Implications in the *Finale* of Brahms's Piano Quintet in F minor, op. 34
Risa Okina (Temple University)

This paper will explore the musical uncanny in the *finale* of Brahms's Piano Quintet in F minor. Several scholars have contributed to the discourse of music and the uncanny (Cherlin 1993; L. Kramer 1990

and 2002; Cohn 2004; Klein 2005; Smith 2005; Péteri, 2007; Venn 2015). Smith mentions the *unheimlich* E naturals in the Piano Quartet in C minor, op. 60: "the E naturals instantiate the *Unheimliche* as an indication of the harmonic and expressive range of the movement and the piece as a whole, and signal an unusual attention to that pitch globally to an extent that remains unresolved within the section or even within the movement" (69). He also explains that the uncanniness is eventually resolved in the coda with a delayed tonal resolution (89). I argue that the uncanny is not something awaiting resolution; rather it invites us on a hermeneutical journey and reflects a composer's private world, their subjectivity. The notion of *das Unheimliche* comes from Jentsch and Freud. Jentsch's uncanny emphasizes a feeling of intellectual uncertainty, in which the uncanny arises when a subject is uncertain about whether an object is alive or not, or real or unreal. Freud's uncanny has a more complex framing as a combination of feelings, situations, and objects, in which a subject feels something horrifying in what was once familiar. In this paper, I will show how the musical uncanny shapes the narrative of a piece, using the *finale* of the Brahms's piano quintet as a case study.

The *Eroica* Continuity Sketches: A Form-Functional Perspective
Thomas Posen (McGill University)

In this paper, I reconstruct the first three single-line, continuity sketches of Beethoven's *Eroica* exposition (Lockwood and Gosman 2013) into "proto-pieces" by realizing the harmonies and textures that the single-voice sketches imply. Using Caplin's (1998, 2013) theory of formal functions, I analyze these proto-pieces to elucidate and compare Beethoven's formal and phrase-structural strategies. I argue that the sketches show Beethoven's multiple innovative approaches for problematizing a lyrical subordinate theme in order to elevate rhetorically the arrival of a new lyrical theme in the development, which parallels Adorno's analysis of the final published piece (Vande Moortele 2015).

For example, in the first exposition sketch, Beethoven writes a modulating transition that moves chromatically through three distant tonal areas. Thereupon he builds an energetic subordinate theme, part 1 (ST^1), while avoiding a lyrical ST^2 by bringing back main-theme material in the same keys that were foreshadowed earlier. In the second sketch, Beethoven omits the tonally innovative ST^2 from the first sketch and instead writes a fake exposition repeat—a remarkable rhetorical ploy whereby the new ST^2 material sounds like a codetta, a re-transition, and a seeming restart of the exposition.

In reconstructing and analyzing the sketches with form-functional theory, I seek a new approach for understanding the *Eroica* sketches. Instead of characterizing passages in the sketches that differ from the published version as problems that Beethoven revised or purged to create an artistic piece, I valorize them to form a more complete "biography" of the work through its fascinating compositional genesis.

PEDAGOGY AND COGNITION POSTER SESSION
Jenine Brown (Peabody Conservatory of the Johns Hopkins University), Chair

The Making of a Theorist: On the Cognition of Music-Theoretic Expertise
Sarah Gates (Northwestern University)

Scholars across a wide spectrum of musical disciplines have discussed how active music-theoretic understanding can affect one's experience of music. Modern pedagogues often refer to this as the powerful bond between thinking and listening, whereby some form of active reflection about music—its components, its structure, and/or its meaning—greatly expands not only conceptual understanding of music, but the *experience* of it. This connection is believed to operate bi-directionally as an iterative

feedback loop: active reflection about music changes how we hear, and how we hear changes our process of active reflection.

In this project, I create a cognitive account of the iterative feedback loop between thinking and listening by combining several cognitive frameworks to explain how it operates. These include expertise acquisition and long-term working memory (LTWM) developed by Anders Ericsson and Walter Kintsch, and Dual-Coding Theory (DCT) developed by Allan Paivio. I position music-theoretic expertise as a form of skilled memory performance (LTWM) where theorists actively build and connect composite multisensory mental representations of theoretical concepts through dual-coding in both verbal and imagistic representational systems (DCT). Dual-coding involves the cooperative activity of language and nonverbal cognitive systems to enhance memory, facilitating growth in knowledge. As the strength and quantity of connections increases within the expanding body of mental representations, so does the fluency and ease with which the theorist can actively recall and engage with them during thinking and listening activities.

The Effect of Vertical Pitch Structures, Timbre, and Duration on Memory for Chords
Ivan Jimenez (Sibelius Academy, University of the Arts Helsinki), Tuire Kuusi (Sibelius Academy, University of the Arts Helsinki), Isabella Czedik-Eysenberg (University of Vienna), and Christoph Reuter (University of Vienna)

A chord can be thought of as an idealized set of pitch relationships that do not depend on timbre, register, duration, etc. A chord can also be thought of as an actual, sounding event in the world, where it inevitably possesses characteristics that pertain to "extra-harmonic" parameters such as timbre, register, and duration. Although thinking of chords in that abstract way facilitates our structuring, memorizing, and understanding music, chords as actual sounding events are also likely to play an important role in our experiencing of music. The present study investigates chords as actual sounding events by testing the ability to identify popular songs from single chords taken from well-known recordings. Although it is currently believed that timbre plays a primary role in the identification of songs from very brief excerpts of music, it is possible that vertical pitch structures may also play a role in that type of rapid identification. As expected, our results showed that chords timbral brightness and, to a lesser extent, their attack time, chord-type commonness, duration, and the song's year of release contributed to the song's rapid recognition. This study shows that memory for chords as actual sounding events can be detailed enough to allow listeners with and without musical training to identify songs from a single piano chord. Results also suggest that both harmonic and extra-harmonic characteristics of single chords are encoded in auditory long-term memory and contribute to the rapid identification of songs from single chords.

Using Principles of Crossmodal Perception to Promote Accessibility and Diversity in the Classroom
Sarah Louden (New York University Steinhardt)

Approximately 1 in 5 college students report having some type of disability (U.S. Department of Education 2019). Only about 30% of these students register for assistance in college, and only 17% of those with *learning* disabilities register (Krupnick 2014). This statistic is troubling when you consider that only about 34% of students with disabilities finish a four-year degree (Mader & Butrymowicz 2017).

Universal Design for Learning (UDL) is an educational theory that seeks to create an inclusive, accessible learning environment that enhances the learning of *all* students and reduces the need for

individual accommodations. One of the basic principles of UDL is teaching through *multiple means* (CAST 2018), a strategy promoted by authors like Straus (2011) and Quaglia (2015) as a way of implementing UDL into the college music curriculum. This poster looks at the benefits of applying research in multisensory perception and crossmodal association to strengthen these approaches and make the music classroom more inclusive.

Numerous studies have demonstrated that multimodal teaching can significantly improve the learning outcome for students with varying types of disabilities (Escobedo et al 2014; Obaid 2013; Guyer 1989), and it has been commonly incorporated into assistive technology (Vélez-Coto et al 2017; Proulx 2014). This poster outlines relevant cognitive literature on crossmodal association and approaches to multimodal strategies in disability studies, then looks at how principles of crossmodal association can be used as design guidelines for creating and strengthening current teaching approaches, and offers example applications for incorporating these strategies into the college music classroom.

Spaced Learning, Screen Names, and Speed:
Fluent Fundamentals in Fifty Minutes Per Week
Jennifer Shafer (University of Delaware)

Many incoming music majors are under-equipped for their first written theory courses. This situation presents significant pedagogical challenges for instructors and can cause students to struggle intensely if they enter a course that they are not prepared for. Weaker students may develop an undue lack of confidence if they compare themselves to their peers, and stronger students can become disillusioned if they do not feel sufficiently challenged.

This poster presents a fundamentals course which works through all three of Michael Rogers' (2004) stages of foundational fundamentals—understanding, developing accuracy, and developing speed—within one fifty-minute meeting per week (35). A flipped classroom model teaches content from note reading to triads through video lectures and interactive handouts that scaffold the learning experience (Shafer 2018), and concepts of spaced practice and retrieval practice (Lang 2016; Miller 2014) and interleaving (Callahan 2019) are used to design homework. Practice is gamified through screen names, leader boards, and a "token" which forgives missing homework grades.

This structure allows students with little or no background to achieve a strong grasp of fundamentals within a one-credit course, and allows stronger students to complete course requirements early if they are ready to do so. These methods create a classroom experience that welcomes all students, regardless of background, and equips them with both the basic tools *and* the confidence that they will need to succeed in their coursework.

Don't Count Your Cadences before They Hatch:
Advocating for Discussions of Closure in Pedagogical Contexts
Brian Edward Jarvis (The University of Texas at El Paso) and
John Peterson (James Madison University)

In a survey of textbook definitions of phrase and cadence, Ann Blombach (1987) finds what she calls a "fatal logical flaw: *phrase* and *cadence* are being defined circularly." Prompted by this flaw, Blombach calls for more precise definitions of these two terms. Later, Caplin (2004) takes up Blombach's plea by asking the musicological community to "take seriously the idea of perceiving closure in a wide variety of ways…." Despite these calls, recent textbook definitions of phrase and cadence maintain this sense of circularity. This poster responds to Caplin by reframing the phrase/cadence issue and its

implications in formal analysis into a broader discussion of the perception of closure that relies on recent work on cadence. We consider the perception of closure as having three primary components— boundary detection, process conclusion, and confirmation— and we show how these three aspects of closure are at play in a variety of examples.

UNSETTLING ENCOUNTERS: TRANSFER, EXCHANGE, AND HYBRIDITY IN GLOBAL MUSIC THEORY
Anna Zayaruznaya (Yale University), Chair

The Original Global and the Global Origins of Music Theory
Andrew Hicks (Cornell University)

Pythagoras resides at the heart of music theory's origin myths, from the ubiquity of the sonorous blacksmith's forge to the purported Pythagoreanism of the *Timaeus,* which embeds a "state of the art" harmonic system in the soul of its cosmogony. But Pythagoras did not work alone. According to a long tradition of Greek "Orientalism," Pythagoras conferred with Babylonians, Egyptians, Chaldeans, Persian magoi, and even—according to a tradition ascribed to "Aristoxenus the musician" (Hippolytus, *Elench.* 1.2.12–13)—met Zarathustra himself. This paper focuses on the Persianate traditions of Pythagoreanism, reciprocally mapping the imaginary travels and historical translations of Pythagoras, both the translation of Persian wisdom traditions into Greek Pythagoreanism and the retranslation of Pythagoras from Greek sources into medieval Arabo-Persian music theory. Both are puzzling. The Greek appropriation of Zarathustra reorients the legitimization of Platonic philosophizing (Vasunia 2007; Horky 2009); and the re-reorientations of Pythagoras in medieval Arabo-Persian sources reinscribe a motif central to the history of Western philosophy (Guttas 1998; Izdebska 2014). Hence, to locate the origins of music theory with Pythagoras is to locate the global encounter at the very beginnings of music theory. But is this "original global" itself a product of the Western imagination, the conflation (à la Walter Burkert and M. L. West) of "orient" and "origin"? Considering this question reveals the fantasy of Greek philosophy's "other" (Hartog 2006) and the productive assimilation of this fantasy by its "other," thereby putting the postcolonial condition at the heart of a global music theory.

Pedagogy and Seduction in the Eighteenth-Century Mission Music of Bolivia
Roger Mathew Grant (Wesleyan University)

This paper examines the teaching of music theory in eighteenth-century Jesuit missions among the Chiquitano indigenous people. Located in what was then the Spanish Viceroyalty of Peru—now eastern Bolivia—rural Jesuit missions fostered vibrant communities of choral and orchestral performance. Archival sources suggest ample evidence of robust collaboration between the Jesuit colonizers and the Chiquitano, with operas and liturgical compositions attributed exclusively to indigenous composers. The scant scholarship that exists on this unusual body of repertoire has celebrated its exceptional status; scholars point to the music making preserved in these archives as proof of an isolated set of instances in which the traditional power hierarchies between Jesuit colonizers and indigenous colonized were unstable, and the musical abilities of the native South American population made true exchange and cooperation possible. But if the Chiquitano brought

excellent musical aptitudes with them into the eighteenth-century missions, what did they experience when they had to unlearn their own traditions and master European musical performance and music theory? Drawing on and slightly modifying Brian Larkin's notion of the "colonial sublime," I suggest that mission music theory pedagogy was not primarily a scene of exchange but rather of colonial seduction. With reference to theoretical works related to solfège in particular, I hope to underscore the role of Western music theory pedagogy in colonial techniques of interpolation. Finally, I aim to draw critical attention to our evolving understandings of hybridity and exchange in the imperialist project of Western music theory pedagogy.

Global Tonnetze
Daniel Walden (The Queen's College, Oxford)

The Tonnetz has come to serve as an emblem of "Western" tonality through the work of theorists from Leonhard Euler to Brian Hyer. But how might a "global history" challenge our understanding of what it represents? The archetypal Tonnetz associated with Hugo Riemann was in fact adapted from a treatise by the Japanese theorist Tanaka Shōhei, in which it represented the tuning of the author's "enharmonium," a just-intonation keyboard marketed as a product of Japanese-German "geistigen Verkehr" (intellectual/spiritual exchange) that would rescue Europe from equal temperament. Thirty years later, the Tonnetz was reinterpreted by the Hindustani theorist G.S. Khare as a representation of Sanskrit tuning systems, reconceived as a bulwark against intrusive colonial tonalities. Neither could be distinguished at first glance from the Riemannian Tonnetz, making them potent political tools for accomplishing the political agendas of their authors: the defamiliarization of European musical practices with tuning systems that sounded almost the same but not quite (Bhabha 2012), and the provincialization of European musical history as a mere offshoot of an "Indo-Aryan" lineage chiefly preserved by Hindustani musicians (Chakrabarty 2009).

I draw on postcolonial, STS, and critical media studies in tracing a global history attuned to the feedback loops of reciprocal influence that shaped "Western" and "non-Western" theoretical discourse. But I also consider two potential perils of global historiography: unilinear developmentalism and cultural relativism, discursive frameworks previously leveraged towards securing European centricity (Scherzinger 2018). Could these pitfalls be avoided by making defamiliarization and provincialization central to future histories of theory?

SCRIPTS, SCHEMAS, AND PROTOTYPES
Lawrence Zbikowski (University of Chicago), Chair

On Prototypes and the Prototypical:
An Investigation of Music-Theoretic Concepts
Richard Ashley (Northwestern University)

This paper investigates music-theoretic uses of the terms *prototype* and *prototypical,* broadly and with specific application to form in popular music. In an examination of almost 200 music-theoretical articles and monographs, three usages emerge: (a) an underlying structure for a musical event, more basic or skeletal than the event itself; (b) a prior model for a musical event, in the same work or in an earlier work; (c) a particularly central or noteworthy exemplar of a musical category. The first meaning's emphasis is *synchronic* and *intrasegmental*, focusing "downward" from the surface to more "basic" musical formations. The second sense of "prototype," that of a prior model, concrete or abstract, is *diachronic* and *intersegmental* or *interopus* in its application, with an emphasis on discovering

and explaining relationships between time-ordered events, within a work developmentally or between works historically. The third sense involves "centrality" or "noteworthiness," and invokes aesthetic or hermeneutic perspectives and goals; in analytic application it typically combines aspects of synchronic and diachronic viewpoints. These music-theoretic notions are situated within cognitive science's understandings of prototoypes and memory—episodic and semantic—and then applied to analysis of popular songs. Two studies are described on prototypicality in song forms: a corpus study of some 600 songs (Billboard Top 10 1958–2018) explicating formal commonality and diversity in these songs' forms, and an experimental study, revealing how listeners use structural (formal) and non-structural (aesthetic, social) factors in understanding song prototypes.

Begging Cadences, or The Rossinian Art of Pandering
Matthew Boyle (University of Alabama)

Following the 1812 premiere of Rossini's *Tancredi*, a Rossini fever swept Europe. This fever was subversive, emotionally rousing the masses in a time of anti-revolutionary political sentiment. Rossini's alluring music ensnared audiences, perhaps even endangering their health. Musical passages cited in accounts of this reception phenomenon frequently contain similar devices: irritating chromaticism, modal shifts from minor to major, bombastic orchestration, and repetitive stereotyped cadences.

These four elements, along with their audience-rousing effects, are defining features of a musical schema I call the *felicità* cadence. The *felicità*, which ends most bel canto numbers, contains three repeated cadential phrases of increasingly shorter length. The initial, longer phrase, although the most flexible, routinely presents omnibus-like chromaticism and modal mixture before concluding with a rapturous "salvation" six-four close. Such musical contagions primed audiences for boisterous, joyous, and even infectious applause. Reception documents confirm that this schema excited audiences, namely by cueing applause, lending it to mockery by German-language critics who called it the *Bettelcadenz* (begging cadence). I explore the form and reception of this schema in examples by Bellini, Donizetti, Haydn, and Rossini.

The *felicità* cadence further suggests that musical schemata encompass aspects of music making beyond the perception of contrapuntal and formal patterns. In addition to purely musical elements, the *felicità* encoded social behaviors (applause) and affect (delirious excitement). Its rich social content demands that schemata be understood as more than mere voice-leading formulas. Instead, schemata like the *felicità* cadence serve an integral role in the fully social act of musicking.

The "Se cerca" Script: Dialogic Networks in an Eighteenth-Century Aria Tradition
Nathaniel Mitchell (Princeton University)

"Se cerca, se dice," the climactic aria from Metastasio's *L'Olimpiade* (1733), was a centerpiece of galant culture. For nearly sixty years, this text inspired over seventy compositions by dozens of the century's most celebrated composers. Moreover, the aria's many settings share a striking number of features, as though each sketched a common subject from a unique perspective. These conventions affected compositional decisions on multiple levels of structure including global features like an E-flat major tonal color and a distinctive multi-tempo form as well as a roster of aria-specific schemas on the foreground. "Se cerca" was thus the catalyst for a rich musical tradition structured by its own dialogic network and generic constraints. In contrast to the style-wide, intergeneric conventions addressed by modern-day *Formenlehre* and schema theory, the "Se cerca" tradition provides an unprecedented look at the largely overlooked situation-specific pressures that animate the galant style.

This paper examines the kind of knowledge required to compose a "Se cerca, se dice," drawing on a corpus study of fifty core settings of the text. Building on recent research into the cognition of musical form (Byros 2015), I model the aria's many replicated features as a "script" (Schank & Abelson 1977)—essentially a cognitive schema capturing "how a 'Se cerca' goes." A focused analysis of the opening stanza highlights shared features such as a "Sol-Fa-Mi" opening plan, specialized punctuation schemas, and orchestral interjection prolonging the cadential progression. The broad shape of the second stanza unfolds as a brief transitional space followed by an antiphonal second theme built around the Fenaroli schema and concluding with a modally collapsed cadential zone. Finally, the fast-tempo third stanza emphasizes vocal pedal points on G5 accompanied by energetic schemas such as the Pulcinella Cadence, as well as text recall from the preceding recitative, among other effects. The "Se cerca" tradition thus offers a window into the manifold intertexts that shape compositional acts in the eighteenth-century, encouraging future research that supplements our existing repertoire of style-wide formal types (sonata, period, sentence, etc.) with the characteristic scripts of specific genres.

BLACK LIVES MATTER IN MUSIC:
A CONVERSATION WITH TAZEWELL THOMPSON, LIBRETTIST OF "BLUE"
Steve Swayne, Richard Desinord, Naomi Andre

GESTURE, THE MIMETIC HYPOTHESIS, AND MUSICAL FEELS
Juan Chattah (University of Miami), Chair

Being Cecil, Feeling Feldman: Gestural Analysis of Two Avant-Garde Piano Works
Christa Cole (Indiana University Bloomington)

Despite recent sociological, technological, and composer-specific scholarship on the twentieth-century musical avant-garde (Piekut 2014; Iverson 2018; Cline 2016), analytical tools available for engaging with aleatory and improvisatory musics remain under-established. In this paper, I present an analytical approach that accounts for the listening and performing body, applying a gestural analysis to piano works by Cecil Taylor and Morton Feldman. My approach considers the intersections between instrumental affordances (Windsor 2017; De Souza 2017), pianistic gestural conventions (a concept I develop), and listener subjectivity (Cumming 2000), while addressing layers of mediation in performance and reception. I take a personal, "mimetic" listening experience (Cox 2016) as the basis for investigating a broader question: How might a body-oriented analysis shed light on potential approaches to this repertoire?

To explore this question, I analyze two video performances of Taylor's and Feldman's music, identifying and categorizing "foundational gestures"—discrete, identifiable performer movements that may be observed, described, and (potentially) replicated. Building on this categorization and description, my analysis builds a body-centric gestural lexicon for Taylor's and Feldman's piano music. This identification and analysis of bodily gestures, along with their corresponding sounding musical gestures, opens the door for listeners to engage with this music in new ways. Because aleatory and improvisatory works often feature realizations that differ widely between performances or lack a score altogether, these kinds of gestural readings prove especially beneficial for the analyst.

Mimetic Invitation in Shaw's *Partita for 8 Voices*
Crystal Peebles (Ithaca College)

With its post-minimalist diatonicism, strong rhythmic pulse, and melodic repetition throughout all four movements, the surface of Shaw's *Partita for 8 Voices* is quite accessible, but I argue that its general

public acclaim results from various degrees of mimetic invitation within this composition, a perspective also explored by Fulton 2019. Drawing from Cox's (2011) mimetic hypothesis, I illustrate how these degrees of mimetic imagery, most notability a work's "singability" and "dancability," correspond with the formal structure in the "Allemande" and "Passacaglia." Further, I map the opposition of mimetic attenuation and invitation onto the ideas of individualism and community. Shaw's use of intertextual references throughout this piece (Belcher 2019), especially those from American vernacular traditions eliciting communal participation, support this reading. This perspective casts the listener as an active agent in the creation of a musical community. As this represents a subjective, bodily way of knowing this music, it raises the important question: whose voice and body is represented in this analysis (Cusick 1994)? While I can experience a narrative of communal joy in this composition, others may experience a systematic oppression of the voice of the "other," as sounds that I can't imagine singing are exploited and exoticized (Davids 2019). Considering degrees of mimetic engagement and the way it shapes musical meaning as situated in the analyst, speaks to the wider concern of inclusivity in our field.

Musical Feels
Dora A. Hanninen (University of Maryland)

When we think of music, we think primarily of sound. But musical experience is multifaceted and multimodal. Music performance, in particular, engages multiple faculties—aural, intellectual, visual, and kinesthetic. Musicians not only hear, but *feel,* sounds, as a complex choreography of precise physical actions, and qualities and dynamics of motion. This paper explores the grains and flows of somaesthetic experience (Shusterman 2012) that I call *musical feels* and illustrates how these might be incorporated in music analysis.

Part I identifies the phenomenon and considers framing issues of ontology, language, and first-person research methods. Musical feels are multimodal qualia—amalgams of sound, structure, sight or visual imagery, touch, and somatic and dynamic qualities of movement. I explain how musical feels intersect with but differ from musical gesture, musical feelings or emotions, and objective, measurable aspects of movement. Like Boretz's (1989) "determinate feels," musical feels are radically particular and subjective. But if we investigate feels carefully and speak clearly, they can be surprisingly intersubjective and so might be meaningfully included in music analysis.

Part II presents detailed analyses of the workings of several (for me, a pianist) especially intense musical feels. One is in the second movement of Bach's Italian Concerto. Others come from works by Scarlatti, Brahms, and Berg. Paradoxically, the import of this paper lies not so much in the musical feels I discuss, as in those I cannot yet discuss, but hope to evoke and bring to vivid attention: they are yours and those of every other musician.

SONATA PROBLEMS
Carissa Reddick (University of Northern Colorado), Chair

Two Langerian Sonata-Form Problems, with Solutions by Beach and Medtner
Christopher Brody (University of Louisville)

As nineteenth- and twentieth-century composers adapted the late-eighteenth-century sonata model, they were at pains to solve two related "problems," or points of aesthetic unsatisfactoriness that (their music suggests) they discerned in earlier works. The *first-movement problem* is the sense that the main structural–narrative interest is frequently dissipated too early—around the beginning of the

recapitulation. The *multimovement problem* is the sense that, since first movements are usually the longest, weightiest, most complicated, and most goal-directed movements in a three- or four-movement work, the entire multimovement structure begins with its most interesting material and leaves less to look forward to later. Concepts from Susanne Langer's *Feeling and Form* clarify what is at stake: while eighteenth-century works often emphasize *comic rhythms* (circular, ritualistic, impersonal, exteriorized), later music steadily shifts toward *tragic rhythms* (teleological, individualized, personal) in both first-movement and multimovement form.

In this paper I sketch four distinctive and compelling solutions to these two problems in two works each by Amy Beach and Nikolai Medtner. Beach's Violin Sonata (1896) addresses the first-movement problem in a Brahmsian way (movement 1) and again in an innovative Type 1–Type 2 hybrid form (movement 4). Medtner's Sonata in G minor, op. 22 (1909–1910) engages the same problem with a "failed development" that keeps the structural ball in the air until the movement's coda. Finally, Medtner's *Night Wind* Sonata (1911) imaginatively confronts the multimovement problem by building two sonata structures within a frame that catastrophically undoes the resolution provisionally achieved within each.

Formal Problems as Opportune Inconveniences in Haydn's Late Piano Trios

Jan Miyake (Oberlin College & Conservatory)

In the last decade, our discipline has described how Haydn's music is underserved by current theories of form (Burstein 2016; Duncan 2011; Fillion 2012; Korstvedt 2013; Ludwig 2012; Neuwirth 2011, 2013; Riley 2015). After analyzing final movements of the symphonies, keyboard sonatas, and keyboard trios, a group of trios stood out for the similarity of their formal ambiguities. About half (18) of the final keyboard trio movements are described best as a type of sonata form and the other half (18) by either an ABACA or ABA form. Two of this latter group, however, also display striking aspects of sonata form, and the construction of the lone sonata rondo from the former group is atypical enough to make its categorization quite Procrustean. Trios no. 32 (Hob. XV:18), no. 41 (Hob. XV:31), and no. 42 (Hob. XV:30) each offer opportunities to consider how the compositional processes of sonata form pervade Haydn's music, making a formal designation of these movements somewhat inconvenient. Theorists created the tools that led to this situation, but rather than seeing it as problematic, perhaps works that are inconvenient to categorize provide an opportunity for new ideas. This paper describes how Haydn's penchant for sonata-form processes impacts these last-movement forms and offers initial thoughts on a new way to organize Haydn's approach to form.

Dvořák and Subordinate Theme Closure:
"Positive" Analytical Results for a "Negative" Approach to Romantic Form

Peter H. Smith (University of Notre Dame)

Scholars have shown increasing interest in applying the methodologies of Caplin and Hepokoski and Darcy to nineteenth-century form. These efforts often proceed under the assumption that classical norms continued to influence romantic practice, even in the face of nineteenth-century innovations. Vande Moortele terms this approach "negative" in the sense that it interprets what *does* occur in romantic form in relation to classical constructs. He contrasts this methodology with an as-of-yet-unrealized "positive" theory that would derive its concepts directly from nineteenth-century music.

A multi-part strategy interrogates the positive methodology championed by Vande Moortele and such like-minded theorists as Horton and Wingfield. Examination of Horton's recent analysis of the first movement of Brahms's First Symphony reveals the presence of classical norms casting a "negative"

light—although a beneficial one—on his presumably "positive" methodology. A corpus study of S theme cadence in Dvořák's mature chamber music follows, responding both to Horton's concern for tonal delay in his Brahms analysis, and to his and Vande Moortele's calls for expanding the range of composers included in these endeavors. Attention to a less-studied composer betrays the persistent gravitational pull of classical conventions, in contrast to the argument that a romantic-centered corpus would diminish that pull. Finally, analysis of Dvořák's op. 87, I, and op. 61, I and IV, illustrates limitations of corpus study as contrasted with close reading. The close readings underscore the need to engage both circumpolar norms and progressive developments, even in music written late in the nineteenth century.

POPULAR AND VIDEO GAME MUSIC POSTER SESSION
Elizabeth Medina-Gray (Ithaca College), Chair

Brawlers, Bawlers, and Bastards:
The Semiotics of Vocal Timbre in the Music of Tom Waits
Joshua Albrecht (Kent State University)

Probably the most remarkable aspect of Tom Waits's music is his vocal quality, both its recognizability and variety. His music is also distinctly theatrical, most clearly reflected in three albums of stage music. His songs are full of fictional personas who speak in distinct voices, figuratively and literally.

In this presentation, I argue that the semiotics of Waits's vocal techniques, especially his carefully crafted vocal timbres, offer interpretive insights that can cut through otherwise opaque lyrics. Specifically, I argue that there are a relatively small number of character archetypes in Waits's music, marked by a common vocal timbre. To support my theory, I offer analyses of individual songs and a novel empirical approach that classifies Waits's vocal timbres into categories.

Regarding the empirical study, 133 participants each categorized by vocal timbre 40 out of 147 randomly-selected 5-second Waits excerpts. Participants sorted songs into as many as eight categories, provided descriptive labels of timbres, then hierarchically combined groups until there was only one remaining. Acoustic features were also extracted for timbral cues using the MIR toolbox, and texts for each song were analyzed for emotional and topic categories using LIWC2015.

The resulting similarity matrix for all songs was subjected to cluster analysis, which suggested seven timbral categories or character archetypes. These categories demonstrate different timbral profiles, consistent with distinct vocal characters in Waits' music. These empirically-derived timbral connections between disparate songs provides an analytical framework to examine intertextual interpretations through the semiotics of vocal timbre.

Key and Affect in the Million Song Affect
Bronwen Garand-Sheridan (Yale University)

Beyond distinctions between major and minor modes, the notion of key affect is largely absent in contemporary music theory, music theory pedagogy, and the modeling of pitch space. This despite a longstanding practice of describing key affect according to relative positions in pitch space, such that keys flatter than others in pitch space were considered to be calmer and keys that were relatively sharper were considered more energetic. In contrast to prior studies on key affect and key characteristics, which have often associated specific topics to keys, this analysis uses computational modeling to map pieces in an affective space, and then measures the relative distribution of keys within this affective space.

To build our affect space, we tagged 750,305 tracks from the Million Song Dataset (a collection of one million contemporary popular music tracks) with values for tonal center, mode, and seven affective qualities, all queried through the Spotify API. We then applied multidimensional scaling to build a three-dimensional affective space that retains 67% of the affect variance in the original dataset. When mapped onto this affect space, keys appear systematically organized according to their relative position on the line of fifths: sharper keys tend to have fast, angular gestures and distorted timbre, while flat keys tend to have slower gestures and rounder, clearer timbre. By bridging a gap between the syntax and semantics of pitch-space, this analysis thus invites discourse on how to integrate relative key affect in music theory pedagogy and the modeling of pitch space.

Analyzing Subversion in *Undertale* Through Soundscape
Stephanie Lind (Queen's University, Canada)

The video game *Undertale* (2015) achieved massive popularity due to its mix of humor, non-violent gameplay, and a retro aesthetic. However, many of the game's elements, including music, satirize and subvert the expectations established by this aesthetic.

One of *Undertale*'s most interesting features is the way in which retro music interacts with and against elements of its game mechanics and story. How might we analyze this? Many such analyses use transcriptions as a starting-point; however, the most interesting features of this repertoire cannot be represented through pitch and rhythm. We therefore require a re-think: might we be able to use new modes of representation to analyze juxtapositions, interactions, and subversions between its components?

Soundscape analysis is one possible solution, with precedence in both film and game music. Film music scholar David Neumeyer suggestively describes the mise-en-bande as "a kind of musical composition, and aural analysis can then be brought to bear on the sound track as a whole, its relation to the image, and its contribution to narrative" (Neumeyer 2015, ix–x). Game music scholar Karen Collins also sees the full soundscape as vital to our understanding (Collins 2013, 4), and soundscape artist Barry Truax, in advocating for auditory scene analyses, uses language that suggests its "detection of coherent patterns" constitutes musical analysis (Truax 2017, 257).

This poster will examine several moments of disruption and subversion within *Undertale*, some of which additionally exploit a shift into and out of the retro aesthetic in order to magnify moments of shifting player expectation.

An Idiom of Melodic-Harmonic Divorce:
Sub-Circle Motion in Popular Music and the Deceptive ♭VII^{add9}
S. Alexander Reed (Ithaca College)

Moore (1995), Biamonte (2010), and De Clercq and Temperley (2011) explore subtonic harmony in rock, but do not acknowledge ♭VII as a goal in deceptive cadences. I catalogue a dozen familiar examples and situate the cadence within a new class of motion ("sub-circle").

First, in this cadence, the melodic stratum achieves tonic closure while accompanimental strata move to ♭VII, marking an arrival that functions deceptively. Collectively it resembles ♭VII^{add9}, though it is better understood as two processes than a single "chord."

Second, I generalize the cadence within a class of stratified motion common to recent popular music. Specifically, this class comprises progressions wherein the melody is consonant with (and suggests)

circle-of-fifths root motion (+P4) from one accompanying major triad to the next, but the harmonic layer's root moves up instead by a minor third (+m3). Because the new chord has a local subtonic relationship to the expected root, I call this behavior *sub-circle motion.* This necessarily creates a stratification between the melodic layer and harmonic and bass layers. From well-known songs, I cite examples of every sub-circle paradigm. This previously untheorized move is shown as grammatical in popular music. It is an idiom of the melodic-harmonic divorce via Temperley (2007)—and specifically of syntax divorce, per Nobile (2015).

Some Elements of Form in American Popular Music, 1958–1991
Christopher Wm. White (University of Massachusetts Amherst)

This poster outlines some general formal practices within 20th-century American popular music. My project triangulates two trends in the study of musical form: (1) that notions of form should be grounded in the norms of some corpus, and (2) that texture, timbre, and repetition play fundamental roles in popular music's construction. To this end, I analyze the McGill-Billboard corpus (a dataset of chord/formal annotations of American popular music, 1958–1991) supplemented with new annotations that identify textural/lyrical/instrumental changes within these songs.

My analysis relies on timbre/textural changes, formal zones, and time, and uses these event types to study the interaction of these parameters. For instance, I show that when a song introduces a new formal zone, it frequently does so with a textural change, and that the last moments of a song introduce relatively more new and novel events.

I combine these observations to create two formal archetypes. First, I identify the most-frequent formal zones (verses, choruses, and their pairings) as *core modules,* and describe ways that these modules can be expanded by additional zones and textural/timbral variations. Second, I theorize the concept of the *novelty hook*: after songs introduce their initial musical materials (creating an opening peak in novelty) they sink into increased repetition (creating a novelty dip) before deploying a final surge of novelty in the last moments of the track. Using evidence from music cognition, I argue that this paradigm evidences both a standard compositional practice and also an accompanying listening strategy.

FOSTERING DECOLONIALITY IN MUSIC: FROM LOCAL ARCHIVES TO GLOBAL DIALOGUE
Robin Attas (Queen's University), Lillian Saldaña (University of Texas at San Antonio), Lindelwa Dalamba (University of the Witwatersrand), Philip Burnett (University of Bristol), Yvonne Liao (University of Oxford), David Irving, Roe-Min Kok

Recent years have seen intensive critical engagement across the humanities with questions of decoloniality (e.g. Quijano 2000, Mignolo 2011, Mignolo and Walsh 2018, Bhambra et al. 2018). This engagement has had profound implications for the academy, not least for music research and teaching. As in the rest of the humanities, the coloniality of knowledge production is now widely acknowledged. The collective interrogation of cultural paradigms and their perpetuated structures of power are reflected in the growing development of decolonial approaches, methods, and pedagogies that focus explicitly on the ways in which sonic and embodied practices can be (re)appraised through neglected voices and communities (e.g. Stanton 2018, Robinson 2020). Indeed, the engendering of dialogue between music historians, theorists, and educators has been instrumental in further articulating the decolonial concerns of the twenty-first century, in particular the "liberation" of knowledge, as demonstrated by the many related symposia and panels at AMS, SMT, and SEM. These decolonial

concerns have dovetailed, moreover, with considerations of social justice, indigenous cultures, and scholarly efforts in producing counter-histories and "histories from below" in order to confront and rethink the influence of Eurocentric epistemologies stemming from Enlightenment models, notably the so-called musical canon and the ways it is researched and taught.

Building on these various discussions of power and decoloniality, our proposed workshop for music historians, theorists, and educators introduces an important third element, "local archives," which we define as alternative sites for the production of knowledge to contest and further democratize existing ways of knowing. In doing so, our workshop aims to foster new perspectives on decoloniality in music, exploring the local archives' multiple possibilities for decolonizing practices as a shared advocacy on the one hand, and as a contextually understood mandate on the other. More specifically, the speakers will each examine what local archives mean in their research and public engagement, and the extent to which these archives are imbricated with institutional agendas. Together, the speakers will also think about the potential scope of bringing varied archival research methods as well as indigenous perspectives into productive dialogue, thus enabling them to probe the prospects and challenges of engendering global dialogue amid broader questions of decoloniality in research and teaching.

This exploratory workshop aims to reach out to scholars in both the AMS and SMT communities, and consists of music historians, theorists, and educators from a range of cultural backgrounds, career stages, and global perspectives. After introductory remarks by the chair, the four presenters will each deliver a 10-minute position statement, to which the two respondents will each provide a 5-minute response. There will then follow an open-floor moderated discussion. It is envisaged that this workshop will attract a diverse range of participants, particularly graduate students and early career researchers. At a deeper level, the workshop will also provide a timely forum for its participants to deliberate on the problems and possibilities of practising decoloniality, in an effort to bring together archival voices and communities as a form of collaborative action.

ANALYZING RECORDINGS
Bruno Alcalde (University of South Carolina), Chair

Microtiming the Marginal: The Expressive Rhythm of "Insignificant Noises"
in Recordings by Claire Chase, Evgeny Kissin, and Maggie Teyte
Richard Beaudoin (Dartmouth College)

Is the sound of breathing inappropriate? The recording industry seems to think so. Sound engineers often classify audible breaths as "extraneous noises;" apologetic record producers deem them "insignificant;" and a leading audio editing company markets a "breath control" plug-in that removes all traces of inhaling and exhaling via their proprietary "intelligent suppression" software. The same philosophy of negation applies to sounds of effort (grunts, moans) as well as those created by recording media (wax cylinder clicks, vinyl hissing).

All sounds deserve recognition. This paper asserts that non-notated sounds in recordings of notated music are neither extraneous nor insignificant; rather, they are integral to a recording's expressive content and analogous both to facial micro-expressions and the Barthian photographic punctum. Non-notated sounds are here divided into three categories: (1) sounds of breath, (2) sounds of exertion, and (3) sounds created by the recording apparatus itself. Each category is illustrated by a recording of early 20th century music: Claire Chase recording Varèse, Evgeny Kissin recording Prokofiev, and Maggie Teyte recording Debussy. Fusing spectrographic microtiming measurements

with score-based rhythmic analyses, I probe the question: how does the rhythm of sounds created by the bodies and equipment of performers relate to, interact with, and expand upon the rhythm of the work being performed? In conducting a census of the sounds captured by the microphone, this research opens a space to analyze—and to celebrate—the expressive content of sounding bodies, instruments, and recording machines.

Gendering Virtual Space: Vocal Placement in Recorded Popular Music
Michèle Duguay (The Graduate Center, CUNY)

This paper establishes a methodology for analyzing *virtual space*—the sense of physical space evoked in a recording via reverberation, stereo placement, and other sonic parameters. More specifically, I analyze *vocal placement*—the apparent location of a voice within this virtual space. While these sonic features are a central concern for both mixing engineers and listeners, they are seldom analyzed. Existing music-theoretical approaches to the analysis of virtual space rely primarily on the analyst's subjective perception (Moore & Dockwray 2010; Camilleri 2010; Vad 2017; Zinser 2019). To complement these studies, I provide an empirical method using digital sound-processing tools to precisely locate recorded sound sources in virtual space. To illustrate my methodology, I analyze vocal placement in "Love The Way You Lie" (Eminem feat. Rihanna 2010), "The Monster" (Eminem feat. Rihanna 2013), and "MotorSport" (Migos, Nicki Minaj, Cardi B 2018). Through my analysis of these songs, I argue that the vocal placement of an artist is often based on gender. This paper demonstrates how digital methods can be used to analyze the construction of gendered meanings in recorded performance.

Tempo as Form:
Unnotated Orchestral Rubato in Early Recordings, Treatises, and Composition
Nathan Pell (The Graduate Center, CUNY)

The belief is widespread amongst modern scholars and practicing musicians that the pervasive flexibility of tempo heard on early recordings constitutes a "liberty" of Romantic performance practice, originating with Wagner and Liszt (Rosenblum 1994) and unforeseen by earlier composers (Bowen 1993). This view, however, sits at odds with an abundance of sources from the late eighteenth and early nineteenth centuries (Brown 2004), which demonstrate not only that such rubato predated Wagner by several decades, but that composers even *expected* the tempo to fluctuate in certain well-defined situations, which I enumerate. Working from these expectations, I argue, composers *wrote tempo fluctuations into their music* through the notes they chose, in striking alignment with their formal layouts.

Building on work by Philip (1992), I show that the rubato described in early nineteenth-century treatises is exemplified in pre-WWII orchestral recordings (where tempo practices are clearer than in solo or chamber music), using tapping data I collected from ~350 recordings of around 40 Classical and Romantic sonata movements. And I note ways in which the familiar features of sonata form might encode changes in tempo, identifying the norms of typical sonata-form tempo design and passages that flout these customs.

These conclusions require us to expand our notions about what constitutes form. If the tempo practices on early recordings indeed have their roots in the early nineteenth century, then they are as much a part of the music's form as its harmonies and phrase structures. In other words, I consider tempo a form-defining parameter.

(RE)DEFINING DRAMA
William Marvin (Eastman School of Music), Chair

Loosening the "Shackles" of Sonata Form:
Intersections of Formal, Tonal, and Operatic Drama in *Fidelio*

Benjamin Graf (University of North Texas) and Graham Hunt (University of Texas at Arlington)

Recently described as "the first 'mind-splitting' opera in the canon," Beethoven's *Fidelio* is a *tour de force* of intertwined plot lines, heroism, romance, and politics (Dean 1996). Indeed, the underlying dramatic plan of the opera is inextricably linked to the form and structure of its musical processes. This analysis illuminates striking connections to the dramaturgy by exploring formal-tonal relationships that extant scholarship has addressed in a limited capacity: "...a background awareness of sonata…can add interesting dimensions to one's appreciation of features [in *Fidelio*] that seem to underscore dramatic points precisely by evading or subverting sonata-form norms" (Tusa 1996). This research adds a new dimension to the discourse by engaging recent theories of aria-sonata forms—most notably Martin (2016b) and Hunt (2017). Furthermore, the analysis explores salient intersections of form and tonal structure, particularly motivic connections to Pizarro's murder plot and Leonore's romantic-heroic rescue plan.

The Dramatic Potential of Auxiliary Cadences in Cole Porter Songs
with Minor-to-Major Choruses
Morgan Markel (Eastman School of Music)

In the Great American Songbook, sectional verse-chorus and simple chorus songs with choruses in the minor mode are far less common than those in major. Even rarer are choruses that move from minor to the relative major. Yet, Cole Porter wrote seven well-known solo numbers with this harmonic schema for seven different musicals that premiered during the height of his Broadway career between 1929 and 1954. In this paper, I interpret these songs as featuring large-scale auxiliary cadences that span the entire song form. Through analyses of individual songs, such as "So In Love" from *Kiss me, Kate* (1948) and "Get Out Of Town" from *Leave it to Me!* (1938), I demonstrate how the auxiliary cadences in these songs interact with form, motives, and lyrics to create dynamic narratives in which musical and lyrical resolution is reserved until the conclusion of each song. Moreover, I offer some closely-related voice-leading prototypes to summarize the similar harmonic and contrapuntal motion exhibited in these songs: in each prototype, the verse prolongs the major submediant (VI), and the beginning of the chorus prolongs the minor submediant (vi) before eventually moving to and confirming the tonic *Stufe* (I). Together, my analyses and prototypes build and expand upon the work of Berry (1999), Buchler (2016 and 2018), Forte (1993 and 1995), Gilbert (1995), and Shaftel (1999 and 2016), who have used Schenkerian analysis as a means to explore voice leading, counterpoint, and motives in individual songs in the Great American Songbook.

Discovering Dramaturgy in the Music of Sofia Gubaidulina
via Valentina Kholopova's System of Expression Parameters
Sasha Drozzina (Toronto, Ontario)

Valentina Khopolova (b. 1935) is a prominent Russian music theorist working at the Moscow Lomonosov State University, primarily focusing on twentieth-century classical music. Her work remains overlooked in Western music academic scholarship, while the research of her brother, Yuri Kholopov (1931–2003), is cited profusely (Ewell 2012; Cairns 2014; Segall 2017).

This paper shows how Kholopova developed a powerful system of "expression parameters," or EPs for the music of Sofia Gubaidulina, and my own application of the system to Gubaidulina's repertoire of the 1980s. For Kholopova, the EPs are elements of musical composition expressing drama; they are thematic and primary, and can range from methods of articulation, dynamics, register, etc. Each EP has either a consonant or dissonant value. Ewell (2014) applied the system to Gubaidulina's Ten Preludes for Solo Cello (1974). I focus on the important but previously disregarded factors that in each given work the pairings are initially *neutral*; dissonance is never viewed as "negative"; and the binaries work in tandem. I demonstrate how Kholopova's system especially enriches the understanding of Gubaidulina's multi-movement works of religious nature for several instruments, such as *Rejoice!* Sonata for Violin and Cello (1981) and *Sieben Worte* (1985). *Sieben Worte* largely explores timbral properties and therefore the set of EPs is selected based on the prominence of harmonic coloring throughout. Kholopova's mode of analysis retains the dramaturgical meaning, which is at the forefront of the majority of Gubaidulina's pieces, born out of the dialogue between the pairings and their gradual synthesis.

WHO IS ALLOWED TO BE A GENIUS?
Sponsored by the Committee on the Status of Women
Judith Lochhead (Stony Brook University), Chair
Laura Emmery (Emory University), Moderator

The Committee on the Status of Women (CSW) in conjunction with the Queer Resource Group (QRG) is sponsoring a session entitled "Who is allowed to be a genius?" Our goal in this session is to focus attention on the ways that the designation of "genius" is bestowed on some and denied to others and also on the ways that the designation of "genius" has permitted and even encouraged behaviors that are discriminatory and abusive. The session includes two contextualizing papers by members of the CSW and QRG.

Genius and the Canon: The Effects of Exclusion
Cora Palfy (Elon University)

Contextualizing Musical Genius: Perspectives from Queer Theory
Vivian Luong (University of Saskatchewan) and Taylor Myers (Rutgers University)

The Work of a Novice: Genius, Professionalism, and Contemporary American Women Monastic Composers
Charity Lofthouse (Hobart and William Smith Colleges)

This paper explores questions of genius through the works of contemporary nun composers, examining characterizations of their music as "professional" or "amateur." I contend nuns' religious profession and depictions of their music making as divinely inspired positions their contemporary compositions as amateur and lacking divine inspiration.

Though highly feminized in media depictions of chanting and "hum-and-strum" folk singing, nuns represent a cultural outgroup that occupies non-binary spaces while simultaneously subjugated by religious institutions. Nuns are presented as Platonic geniuses—vessels of divine musical inspiration—as far back as Hildegard's visitations, while chapel designs obliged nuns to perform unseen until 1960 and excluded them from professional musical exchanges until 1965.

Three interlocking factors buttress perceptions of contemporary nun composers as unsophisticated

and uninspired, despite their education and stylistic diversity: First, Vatican II reforms made professional (male) composers Beethovenian guardians of traditional forms, just as nuns gained access to advanced degrees and public performances. Second, media commodification and feminization of American religious life in the 1960s placed nuns' music into a gendered "amateur" category. Third, nuns' religiosity and traditionalism strongly contrasted with second-wave feminism, excluding them from definitions of genius encompassing modernist female composers.

Sr. Theophane Hytrek, Sr. Miriam Therese Winter, and Elise, CHS serve as case studies, spanning genres from chant to feminist songs to symphonies. Analyzing these works not only acquaints us with this repertoire, but also shows how attitudes about compositional genius continue to affect nuns' musical reception, much to the detriment of both feminist and music scholarship.

A Nun or Avant-gardist? Heterogenous Creative Aspects in *Byzantine Concerto* by Serbian Composer Ljubica Marić as a Reaction on Socio-Esthetical Limitations of Former Yugoslav Milieu
Nikola Komatović (Independent Scholar)

The Second World War and the subsequent change in the socio-political structure of Yugoslavia profoundly impacted the cultural policy of the region. The new communist government imposed the aesthetics of socialist realism per USSR's 1930s doctrine. However, following Yugoslavia's break from the Eastern Block in 1948, certain avant-garde elements were somewhat tolerated. Ljubica Marić (1909–2003), the first Serbian formally-trained woman composer in the country, was one of the key figures in this post-war Serbian avant-garde music scene, navigating through a complex political and patriarchal system.

Unable to find a steady position, she completely withdrew from the publicity, commenced experimenting with religious mysticism and studied Byzantine music theory, especially the *Ochtoechos*— a medieval Christian Orthodox Church scalar system. These discoveries of music structures led her to develop new aesthetics and compositional techniques, resulting to the creation of some of the most important compositions in the Serbian modernism.

In this study, I will try to answer this question—how did Marić obtain a comparative advantage against her male colleagues, and why is she today considered to be one of the most successful Serbian composers of all the time?

Through my analysis of her key avant-garde compositions, I will explain how Marić's combination of archaic and avant-garde music expression not only created a new modernist aesthetic, but also paved the way for new generations of composers, and especially women, who today remarkably make the majority of composers in Serbia.

Romantic Geniuses, Idiot Savants, and Autistic People Who Are Good at Music
Joseph Straus (The Graduate Center, CUNY)

People identified as "idiot savants" are generally considered "mentally deficient," while simultaneously demonstrating impressive skill in some area (often music). The savant skill is often understood as a mark of genius, within the familiar trope that likens the Romantic genius to a mere vessel through whom divine inspiration passes. The ascription of genius *enfreaks* these musicians as simultaneously more and less than human: their superhuman gifts deepen, by contrast, the abjectness of their subhuman mental capacities.

The coveted, valorizing label "genius" has been often been denied to groups of people on the basis of race, gender, and other systems of oppression. For the musicians discussed in this paper, however, the label has been foisted upon them, and not to their benefit. Rather, it has removed them from the human community (as superhuman) and deepened the stigma of their intellectual disability (as subhuman). By disenchanting the idea of genius and stripping away the savant label, we will be able to see these musicians for what they are: autistic people whose autism enables their distinctive ways of making music. I will pursue my argument by sympathetic evaluation of the musical careers of three musicians who have been widely identified as idiot savants, and whose savant skills have been understood as marks of musical genius: Thomas Wiggins ("Blind Tom"), Leslie Lemke, and Derek Paravicini.

Artificial Creativity, Artificial Genius: Improvising Computers and the Listening Subject
Jessica Shand (Harvard University, New England Conservatory)

In this research, I turn toward musically improvising computers to unpack notions of creativity within 21st-century contemporary art music using American composer Pauline Oliveros's Expanded Instrument System (EIS) as a case study. I allow for a creativity that is co-determined by a non-human, machinic agency, temporarily setting aside Lovelace's famous assumption that machines cannot be creative. In order to do this, I rely on the method of actor-network theory (ANT), examining both human and non-human actors in terms of the natural and social networks of relations in which they exist and thereby assigns agency to all such actors. Through a close reading of the role of computer-improvisers in the music of Pauline Oliveros as performed by her close friend and collaborator, the flutist Claire Chase, I ask: how is creativity constructed in Oliveros's context? How has software and hardware shaped and been shaped by that construction? As in this case study the notion of creativity is strictly tied to that of improvisation, I also question the relationship between the two. To conclude, I directly respond to recent developments in the theorization of the listening subject as put forth by musicologist Nina Eidsheim—namely, her proposal for a vibrational practice of listening in which "music is predominantly understood…as material and intermaterial vibration." I argue that Eidsheim's model breaks down in the face of computer temporalities that operate outside of, even beyond, the material here-and-now: indeed, any contemporary practice of listening must be pliable enough to capture the agency, however immaterial, of the listening machine.

PLENARY SESSION
CHANGING THE STORY:
EMBODIMENT AS MUSICAL PRACTICES AND EXPERIENCES
Marion A. Guck (University of Michigan), Chair

In our plenary session, we address embodiment in relation to music, thought, and experience. Expanding recent work on embodied cognition, performance studies, and disability studies, and topics such as gesture, instruments, and materiality, our speakers today take on actual bodily experiences of individuals. Our presentations situate embodiment in multiple dimensions, engaging in and with music and exploring society and identity; musical temporality; perspectives from analysis, performance, and dance; and disciplinary definition. In doing so, they show some of the paths open to music theory through exploration of our embodied musical practices and experiences.

Mariusz Kozak considers musical temporality as an enactment of patterns that extend and intensify one's everyday physical engagement with the world, implicating moving bodies in music analysis. Marianne Kielian-Gilbert suggests that Music Theory can expand to encompass social/relational and identity practices by taking a materialist and performative approach to processes of musical embodiment, considering two performances by Nina Simone of "Little Girl Blue" in light of these ideas to draw attention to ways of dramatizing affective and corporeal experience. Fred Everett Maus addresses the conceptual path taken by modern professional music theory and a different path that might have been taken had ideas of embodiment-oriented music-thinkers, Alexandra Pierce, Pauline Oliveros, and Helen Bonny, been recognized as contributions to professional theoretical thought. Through vignettes of embodied musical experiences, Daphne Leong asks about visual bias, physical actions, and musical structure from the perspectives of analyst, performer, and choreographer.

Kinesthesis, Affectivity, and Music's Temporal (Re-/Dis-)Orientations
Mariusz Kozak (Columbia University)

In this talk I examine the relationship between time, embodiment, and affectivity in music. I argue that music is temporal not because it unfolds in time, or because it takes time as its vector, or even because it has the capacity to alter our sense of temporal flow. Rather, music is a temporal artform because it is constituted by a situated body moving in relation to sound. Like other artforms, music isolates, extends, and intensifies the dynamical patterns of our everyday engagement with our environment. This engagement folds ongoing processes into the body's own temporal frame, giving them a past, a present, and a future. Since humans are fundamentally animate creatures, this folding-into is achieved through a moving body. In this view, musical time is a system of affects—intensive qualities—that define the nature of our openness to the world. Musical time is something felt in a physical, kinesthetic sense through a body that responds to sound by intelligibly coordinating its movements in different ways. Because of its intimate link with the moving body, music has the capacity to orient, reorient, and even disorient our temporal frame by altering the physicality of our engagement with sound.

Dramatizing Difference:
Embodying Music's Materiality and (Inter)subjective Dynamics
(Nina Simone's "Little Girl Blue" from *Live at Montreux 1976*)
Marianne Kielian-Gilbert (Indiana University Bloomington)

What does it mean to listen from a position of privilege? How or do our social-relational positions show up in the language we use, the analysis we do, and/or in the ways we listen and hear? When and

as music emerges from deep lived and emotional experience, what happens to its vividness under the lens of music theory and analysis?

A materialist and performative "turn" to processes of musical embodiment shifts from categorizing difference to dramatizing and enacting its physical/material and social-relational dimensions. Experiential, processive, and (inter)subjective dimensions come to the fore—*temporal* (layers of temporal implication open to each other), *material/physical* (connections through "transversal" encounters), and *emergent* (form-changing transformations).

Nina Simone's performances of "Little Girl Blue" from her first album (1959) and *Live at Montreux 1976* draw attention to ways of dramatizing and bringing music to life, and contend with her jazz- and classical-oriented training as a pianist in a racially divisive world. I emphasize the relational/(inter)subjective and processive/"in-between" character of musical embodiment in dramatizing and affecting listeners' relationships to music sound.

In reclaiming musical embodiment, the field of music theory inescapably expands to encompass a range of social/relational and identity practices: listening to and hearing multiple and occluded voices, confronting patriarchal orders of power, and destabilizing binaries of difference and identity. Musical embodiments materialize interdependent and changing interactions of identity and community yielding our and music's capacities to affect and be affected—to listen inside out and outside in.

Music Theory in the 1970s and 1980s: Three Women
Fred Everett Maus (University of Virginia)

In the 1970s, music theory increasingly defined itself as a separate field of scholarly research, the trend culminating in the creation of the Society for Music Theory in 1977. A symposium on music theory, delivered to the American Musicological Society and College Music Society in 1976 and published in *College Music Symposium*, shows some of the thinking that led to this consolidation. Allen Forte, Carlton Gamer, Carl Schachter, Peter Westergaard, Vernon Kliewer, and Richmond Browne gave a range of ideas about the current state and future promise of music theory.

In these papers, the role of musical experience varies; considerations of embodiment are absent. I give attention to other conceptions of music theory from the same time, drawing on the work of Alexandra Pierce, Pauline Oliveros, and Helen Bonny. Pierce, a composer and theorist, was active in the Society for Music Theory, though her emphasis on embodiment as a way of understanding music did not become a mainstream concern. Oliveros and Bonny never interacted with SMT. Oliveros's theories about music consciousness are very general; they find realization in many fascinating activities, her *Sonic Meditations* and *Deep Listening Pieces*, which bring together ear-training and creativity. Helen Bonny's music therapy practices involve classical music listening, with implications for theories of musical meaning and musical narrative. From these examples, I ask how professional music theory might have taken a very different course from its inception.

Embodying Music: Three Questions from Practice
Daphne Leong (University of Colorado Boulder)

I ask three questions about embodiment in musical practice, from the perspectives of an analyst, a performer, and a choreographer. How does visual bias influence musical interpretation? How do a performer's physical actions form part of a piece of music? How does musical structure invite one to dance? My vignettes—arising from practical perspectives on multi-modal experiences of music—offer queries rather than conclusions.

"MEANINGLESS EXCITEMENT AND SMOOTH ATONAL SOUND": PHISH AT THE INTERSECTION OF MUSIC THEORY AND CULTURAL STUDIES

On the Persistence of Groove:
Structural Fog and Jouissance in a "Split Open and Melt" Jam`
Steven Reale (Youngstown State University)

This presentation is a case study that springboards off of [PAPER 2]'s taxonomy of dissonant jamming, showing how in a May 7, 1994 performance of the song "Split Open and Melt," Phish's improvised deviations from its established groove create moments of climax. In doing so, the presentation adapts existing theories of groove, such as the importance of both expressive micro-timings (e.g. Keil & Feld 1994; Iyer 2002) and the bodily pleasures of listening to repetition (e.g. Butler 2006; Zbikowski 2004; Garcia 2005; Witek 2017). Notably, many such studies position themselves in explicit opposition to narratives of music governed by delayed gratification and subsequent release (Meyer 1956, 1967); here, Phish's performance does both, and the paper thus suggests a model for synthesizing these competing modes.

Phish first establishes a *default groove*: a four-measure loop with a repeating chord progression where the final measure features an added half beat preceding a cadential "hook" that leads into the next loop. After repeating this groove several times, the musicians begin to strip away its constitutive elements. An "intensity chart" indicates whether each player affirms, conflicts with, or does neither, with respect to one of four parameters of the groove, and it both serves as a visual representation of an aural experience of the jam as well as enumerates an intensity value for each loop; these values are then plotted on an "intensity curve." When Phish almost entirely abandons the groove, a chaotic, unpredictable cacophony–a kind of "structural fog"–dominates, creating an intense musical effect that persists until they "snap back" into the groove. Peaks of intensity occur when few parameters are present, and concomitantly, greatest resolution occurs when they are restored. The listener is asked to perceive the groove persisting through the disorienting brume, and I propose that the experience creates in an attuned fan the kind of pleasurable pain that Lacan calls *jouissance*. Understanding fan attachment to dissonant jamming in Lacanian terms reveals a particular shared value among the fan base to Phish's musical journeying and experimentation.

Towards a Classification System of Improvisational Types in Phish's Live Performances
Heather Laurel

Thoughtful musicological discussions are common among Phish fans despite a general lack of formal musical training. Discussions typically involve the band's live improvisations, which fans divide into two types: "Type 1" and "Type 2." These categories were first introduced in a 1997 online forum by fan John Flynn, who described Type 1 as "jamming that is based around a fixed chord progression," and Type 2 as "jamming that improvises chord progressions, rhythms, and the whole structure of the music." For over two decades, fans have widely accepted and freely referred to these categories when discussing live versions of the band's songs, but this terminology is far too simplistic to accurately describe Phish's wide range of improvisational strategies.

Since Type 1 jams are essentially standard rock solo episodes, this paper focuses on Type 2 jams, which are divided into several sub-categories. While a Type 1 jam may simply circle around a basic two-chord progression (common examples are I – ♭VII or I – IV), a Type 2 jam might use the same progression but deviate from it in the following ways:

1) Consensual Dissonant Jamming (CDJ). Here, individual performers may stray from a song's harmonic progressions, typically leading other members to deviate as well.

2) Resistant Dissonant Jamming (RDJ). In this sub-type, an individual band member resists the basic progression, playing dissonant melodies or chords against their fellow musicians who adhere to the progression.

3) Mayhem Jamming (MHJ). In this rarest of sub-types, all players deviate from the progression using individual dissonant musical ideas.

Replacing the two basic jam-types with these three broad categories not only accurately describes the complexity of rock improvisation, it also reveals that jamming styles are at least in part determined by each member's reaction to dissonance as a way to venture into new harmonic spaces. Audio examples from across Phish's career demonstrate each type. By examining the improvisations of a single rock band, we can create a framework in which to hear other band's jam styles, serving as a springboard for further studies of other improvisational rock music.

Affective Music Theory, Public Musicology, and the Construction of Phish Fan Identity
Jacob A. Cohen

As numerous scholars have argued, Phish fans make up a significant subcultural group in the United States (Allaback 2009; Blau 2010; Yeager 2011). Many elements serve to construct this subcultural identity, including communal experiences (e.g. festivals), style, musical aesthetics, shared mythology, insider knowledge, and issues of race, class, and religion. Although these aspects may constitute identity formation in many kinds of musical affinity groups, Phish fans are unique in that they have also created an analytical tradition around improvisation as part of their identity. This discursive practice, which has unfolded online and in person for over twenty-five years among fans, is not only an example of music theory used by laypeople in the public sphere, but it is a rare example of music theory contributing to the construction of (sub)cultural identity.

This paper argues that Phish fans construct their identity around an analytical discourse that fosters an affective connection between fans and the homemade language and visual objects of their theories of improvisation. Fans privilege improvisational exploration that moves through a variety of keys and grooves as the highest form of musical expression, and therefore invented their own vocabulary to explain the music. A variety of analytical methods–including the creation of improvisational typologies and nomenclature for jamming styles, visual representations of improvisations, and analytical videos–show that a rich and thorough engagement with the band's music is part and parcel of Phish fan identity formation and experience.

Some of these approaches incorporate traditional musical terminology (e.g. Roman numerals) with which many fans are unfamiliar, yet these analytical methodologies still resonate with the fandom because they represent a notion of musical journeying that is fundamental to the Phish experience and musical aesthetic. This discursive practice, what Bakhtin might call a "speech genre," creates an affective connection between Phish fans and the analytical language, and can function as a point of access to subcultural knowledge and as a way of performing subcultural belonging. As Jensen (1992) argues, taking a close look at fan praxis reveals that fandom is a rich site of intellectual activity and human identity formation.

MODULATIONS AND INTERSECTIONS:
DISABILITY AND THE (UN)CRITICAL ROLE OF MUSIC
Sponsored by the AMS Music and Disability Study Group/SMT Music and Disability Interest Group
Jeannette Jones (College of the Holy Cross), Stefan Honisch (University of British Columbia), Chantal Lemire (Western University)

How does music's troubled relationship to bodies, senses, and minds, legitimize the inequalities buttressed by neoliberal capitalism, and its empty forms of "inclusionism?" Going further, how have such inequalities been sustained within Disability Studies? Recently, the emergence of Critical Disability Studies, encompassing postcoloniality, and intersectionality demonstrate how affirmative gestures of collective identity through disability culture, founded upon universalizing rights-based discourses ignore the global, structural, and material inequalities that circumscribe the lives of disabled people around the world, and in particular, the GlobalSouth. This critically nuanced work confronts difficult questions about who is able to participate, and who is excluded in neoliberal rhetorics of empowerment, diversity, and inclusion.

Embracing a Critical Disability Studies framework that centers the work of queer, trans, disabled activists, educators, and scholars of color, this joint meeting of the AMS Study Group on Music and Disability and co-sponsoring SMT Interest Groups interrogates how the "social model" of disability reinforces Euro-American definitions of what is valuable in music, and whose knowledge about music counts. Topics include, but are not limited to, disability representation in music, performance and performativity, identity, ability and virtuosity, intersectionality, transnationalism, globalization, and postcoloniality; our discussions will also touch on the current COVID-19 pandemic. We encourage presentations to move within and around the Critical Disability Studies framework outlined above.

NEW DIRECTIONS IN TOPIC THEORY
Robert S. Hatten (The University of Texas at Austin), Chair

Musical Topics as Products and Tools of Historically Informed Performance
Olga Sánchez-Kisielewska (University of Chicago)

The theory of musical topics aims to recuperate expressive associations elicited by musical styles in their original contexts but lost over time. This desire to approximate modern listening experiences to those of historical audiences is shared by topic-driven analysis and historically informed performance (HIP). In this paper I discuss how performance decisions influence whether topics can be easily identified as such, and argue that facilitating recognition of a topic contributes to the historical informed-ness of a performance.

A series of vignettes illustrate the potential for a productive, bi-directional influence between topic theory and HIP, drawing on performance analysis, topical analysis, and reception study. For example, Mozart's Violin Sonata in E minor, K. 304, Steven Rumph hears a hymn topic suggesting a "spiritual retreat." But whether the passage sounds hymn-like depends largely on phrasing and articulation. Such performance choices need not be informed by performers' identification of a topic but they nonetheless communicate the expressive associations related to the topic. In other cases, topical analysis can offer novel, historically-informed suggestions for performance. The aria "Odio, furor, dispetto, dolor" from Haydn's *Armida* deploys the common signifiers of rage. Less obvious is the presence of the *alla turca* topic, a stylistic allusion that tends to be lost in performance because the accompaniment remains too far in the background. Highlighting the topical elements would accentuate Armida's sonic Turkishness, and in so doing engage with Haydn's musical commentary on how ideas on race, gender, and emotion were intertwined in eighteenth-century culture.

Beyond the Fusion Principle:
Pop Topics in the Music of the Miles Davis Quintet, 1964-1972
Jesse Gardner (The Graduate Center, CUNY)

Trumpet player Miles Davis's 1970 album *Bitches Brew* is taken by many to be the first entry in the genre sometimes called fusion or jazz-rock. However, upon further consideration of the music of Davis and other closely associated musicians in the years preceding and following 1970, it becomes clear that the "fusion" label is too tidy a description of the actual ways in which popular styles are invoked and incorporated in this music. A better way to understand the function of popular-music elements is in terms of topic theory.

One theoretical issue that arises in attempting to apply topic theory to this music is that of what I call the "host genre": the generic background onto which topics are added as external references. A working theory of generic and topical signification is constructed in which the host genre is a potentially unstable theoretical object, rather than an *a priori* designation. A few styles of popular music which serve as important topics and potential host genres are discussed: (1) Latin jazz, (2) soul jazz, (3) hard rock, (4) jam rock, (5) psychedelia, (6) slow "groove funk," and (7) fast funk in the style of James Brown.

Finally, analyses of three Davis-led recordings from this period are presented, with an emphasis on the way in which specific musical moments throw into question the stable identity of the host genre. What emerges is a new understanding of how a sense of genre as in contradiction or even absent contributes to musical meaning.

Transforming the Post-Tonal Topic in Ligeti's Violin Concerto
James Donaldson (McGill University)

This paper proposes an analytical method of post-tonal Topical Networks. Through mapping Lewinian-inspired transformational networks onto hierarchies of topical characteristics, I demonstrate how topics freed from tonal syntax can relate more dynamically. Accordingly, this paper expands post-tonal topical interaction beyond oppositions, specifically adapting Hatten's more co-operative troping categories of topical interaction to interpret topical relations (Hatten 2004, 2014).

I apply this method to Ligeti's Violin Concerto. First, I identify four central topics: Fiddle, Chorale, Lament, and Fanfare. Second, I introduce my hierarchy of topical realization (after Griemas (1984 [1966])): Elementary (necessary characteristics which a topic comprises, though are insufficient to suggest a topic), Intermediate (additional characteristics or nuances lead the listener to suspect a topic), and Actant (specific characteristics which establish a topic). I then network these hierarchies, showing the oppositions between the Lament's and Fanfare's characteristics at Elementary and Intermediate levels and a larger opposition between fifths and tritones across the four topics. I adopt Callender 2007's *Sl* transformation to map significant, topically-related harmonies across the work.

Such a decentralized model reflects broader aims of semiotic theories such a Eco's (1984) "virtually infinite" network of interpretants and Barthes's (1974) analysis through networks of "codes." Through the lens of Topical Networks, the semiotic relationships of Ligeti's Violin Concerto suggest a new method of understanding form in post-tonal music.

APROPOS WAGNER AND STRAUSS
Alexander Rehding (Harvard University), Chair

Precursors of the Tristan Chord and the "Till sixth" in Fétis's *Traité complet* (1844)
Marie-Ève Piché (McGill University)

Fétis's treatise, known for its historical approach to *tonalité*, is also a visionary work that anticipated some of the most iconic sonorities of the late nineteenth century. Fétis acknowledged that the extensions of tonality he illustrated "generate a large number of new chords not yet employed by composers." Among these new chords are "half-diminished" augmented sixths that have gone largely unremarked in the Fétisian literature (Christensen 2019, Campos 2013) and that closely resemble Wagner's Tristan chord (1865) and Strauss's "Till sixth" (1895). How did Fétis manage to theorize these chords that were only composed decades later?

Fétis wrote extensively about Wagner in later publications but never discussed harmony specifically (Christensen 2019). His treatise nevertheless gives insight into how the Tristan chord might be accommodated within his tonal theory: for Fétis, the augmented sixth did not constitute a genuine harmony since it results from two simultaneous suspensions. In contrast, he regarded the "Till sixth" as a legitimate chord (V7) where $\flat\hat{6}$ and $\sharp\hat{2}$ replace $\hat{5}$ and $\hat{2}$. Although these modifications occur in earlier treatises, Fétis appears to be the first to combine them.

Early twentieth-century theorists—Louis and Thuille, Schoenberg, Vinée—became increasingly interested in explaining new, non-standard augmented sixths; unsurprisingly, they recognized a wider range of resolutions than Fétis. His accomplishment in the *Traité complet* is nevertheless remarkable. It is precisely because he based his tonal theory on abstract principles rather than contemporaneous practices that he managed to predict extensions of tonality that became commonplace in the late Romantic era.

Sigfrid Karg-Elert's Common-Tone Transformation System, and His Analyses of Wagner's Magic Sleep Motive
David Byrne (University of Manitoba)

In treatises published in 1930 and 1931, German composer and theorist Sigfrid Karg-Elert (1877–1933) presented a complete system of harmonic transformations involving triads and dominant (or half-diminished) seventh chords. His transformations emphasize retention of common tones, as in the PLR operations of "neo-Riemannian" theory. Karg-Elert's system was inspired by Hugo Riemann's *Schritte* and *Wechsel* (1880), which relate major and minor triads without regard for tonality or function. A crucial difference is that while Riemann's transformations implicitly assume equal temperament and enharmonic equivalence, Karg-Elert's system operates in a three-dimensional just intonation space defined by the pure fifth, major third and harmonic seventh, spanning a potentially infinite number of distinct pitches. While Riemann (1880) invariably explains a motion from C major to E major as *Terzschritt* ("major third step"), Karg-Elert provides multiple interpretations, reflecting the specific pitch-space locations of each triad.

After summarizing the principal features of Karg-Elert's transformational system, I examine his 1931 discussion of the *Schlafakkorde* (the "Magic Sleep" leitmotif) from Act III of Wagner's *Die Walküre*. He first considers the passage from a middleground perspective, focusing on the mediant transformations that link its key areas; this analysis presents notable similarities with Brian Hyer's 1995 investigation of the *Schlafakkorde*, and also prefigures David Lewin's "arrow" notation for transformational networks. Karg-Elert then provides a foreground interpretation of each chord-to-chord motion that illustrates his concept of comma-free modulation. His two contrasting analyses demonstrate how harmonic transformations can reflect both local and global perceptions, and can reveal a sense of tonal hierarchy.

Lyric Forms as "Performed" Speech in *Das Rheingold*
Craig Duke (Indiana University Bloomington)

There is growing recognition that Richard Wagner's mature music dramas owed much to earlier 19th-century opera, but many of the analytical implications of this knowledge remain to be explored. This paper examines one specific generic connection: lyric form (AABA or AABC), an Italian model for short, unified, expressive monologues. As I show through three examples, Wagner continues to use lyric form in *Das Rheingold* in a largely traditional (albeit flexible) way. While many of Wagner's own writings emphasize his departure from the genre of opera, lyric form is actually compatible with the radical aesthetic of the *Gesamtkunstwerk* because it is, by its very generic identity, a synthesis of musical and rhetorical organization. The novelty of Wagner's usage comes in part from his vigorous commitment to dramatic verisimilitude: every lyric-form monologue is "realistically" integrated into a conversation (i.e., it is not a soliloquy), in order to maintain a strong sense of dramatic continuity.

Seen from this perspective, the overarching music-dramatic function of a lyric form lies mainly in the communicative aims of its speaker. In all three of the examples I discuss, the monologue is *performative*

in J. L. Austin's sense: its communicative purpose extends beyond its verbal content. Drawing from work by Edward Cone and Peter Kivy, I call these situations *semidiegetic* because the music can be heard as a representation of the performative dimension of a character's speech, even when that character is not "literally" singing within the story.

PROVINCIALIZING MUSIC THEORY: EPISTEMIC FRAMEWORKS FOR THE NEW COMPARATIVISM
Gavin Lee (Soochow University), Chair
Catherine Losada (University of Cincinnati College-Conservatory of Music), Respondent

Music theory today is structured by the legacy of European and North American epistemologies, deeply interwoven with a history of colonialism. This panel proposes new comparative frameworks that attempt to depart from these epistemologies. In music theory, comparativism can be said to have taken place in the emergence of world music analysis, including the deployment of Western music-theoretical approaches to world music (Tenzer and Roeder 2011), a continued interest in interculturalism, and explicitly comparative frameworks used to discover universals or commonalities across musics and cultural sites. While the new diversity is encouraging in some respects, our panel attempts to supplement these developments with new ethical and epistemological frameworks.

Following the postcolonial theory of Dipesh Chakrabarty (2000), "provincializing" music theory as it is practiced (originally in Europe, but now globally) means destabilizing Eurocentric musical epistemology. This does not translate to a reflex turn to difference, however, as the latter term has been problematized as a function of commodification and colonial governance (Currie 2009; Scherzinger 2019). An anti-hegemonic and/or non-hierarchical comparativism would have to navigate similarity—and indeed universality—as well as difference, against the unstable ground of shifting but particularized epistemic contexts. Through "reverse" universality, circulation, and contextualization, these papers rethink "difference" and propose a series of epistemic correctives—unique to music theory—against unqualified applications and blanket condemnations of comparativism.

Pre-Colonial Rhythm and Meter in Africa
Martin Scherzinger (New York University)

How do we frame musical thought in the historical period of settler colonialism? Some key ideas have begun to emerge. The concept of Newtonian *absolute time,* for example, gained ascendancy (following prolonged intellectual efforts to locate the correct measure of time in seventeenth-century astronomy) and was efficiently and militaristically leveraged in service of colonial governance. Matrices for framing *musical time* were theorized along similar lines; and, along with pitch spaces, instruments, devices, electrical currents, political nation-states, legal policy guiding intellectual property—instrumentality itself—were standardized and scaled. This analysis reckons with the limits of music's standardized representation schemes by analyzing musical techniques and technologies that did *not* survive the colonial assault. With reference to mid-century *matepe* music from the Korekore region in northern Zimbabwe and *amadinda* music from the Kampala region in southern Uganda from the era before the destruction of the Lubiri Court, I show how these African cases, in a significant sense, actually *invert* the abstract relation of rhythm and meter altogether. In both *matepe* and *amadinda* music, there is no single fixed meter against which flexible rhythmic activity unfolds. First, the interlocking parts of *amadinda*, for example (*okunaga* and *okwawula*)—both perceived by the performers to be *on* the beat—elaborate different basic meters. Second, an additional meter emerges within a third part (*okukonera*) played in the upper register of the instrument. Third, four additional inherent patterns form within the middle registers of the total configuration, each implying a distinct metric scheme.

Global Sonic Genealogy of the Pentatonic Scale
Gavin Lee (Soochow University)

This paper proposes a new method of comparativism called "global sonic genealogy" that actively disrupts the outdated notion of *discrete* cultures embodied in musics, a notion premised on a colonial-capitalist musical ontology that emerged in the 16th century (Sykes 2019). Rather than simply applying old methods to new repertoire in the theory and analysis of "traditional" world music, we should refurbish our discipline's Eurocentric conceptual foundation, in which self and other are bifurcated into the traditional and the modern. I proceed by taking a page from the emerging field of global music history (Strohm 2019), refocusing that view of the *longue durée* on music theory's traditional emphasis on sonic objects. Four historical conceptions of the pentatonic scale are articulated by (1) scholars in the ancient China court before 221 BC, (2) the missionary Father Jean Joseph Marie Amiot in China in the 18th-century, (3) 19th century composers in the US, and, (4) the Texas-born composer John Sharpley who migrated to Singapore in 1986. A global sonic genealogy (GSG) of pentatonicism fundamentally disrupts the hoary (16th-century European), common-sense conception of discrete cultures. Tracing pentatonicism across the 4 cases, GSG embodies a new paradigm of *normative* circulation across time and place, displacing *monocultural* siloes which mandate the language of "inter-" in the first place. GSG embodies a fundamentally different, global ontology and epistemology that axiomatically refute containment in cultural boxes.

Comparative Musical Modernism:
Jia Guoping's *Whispers of a Gentle Wind* and Helmut Lachenmann's *Allegro Sostenuto*
John Roeder (University of British Columbia)

According to Lewin (1969), music theory describes how "composers and listeners appear to have accepted sound as conceptually structured." He advised that for unfamiliar music—including music from "other cultures"—analysts need to foreground and explicate appropriate theories. I consider what concepts are relevant to *Whispers of a Gentle Wind* by Jia Guoping, a Beijing composer who exemplifies global modernism. The traditional Chinese instruments in this work do not seem to act as independent agents. Rather, it seems that an unseen energy elicits sounds from them, as a wind draws sonorities out of a natural environment. I consider how the Taoist concept of *qì* could characterize this energy flux. A spectrogram shows how energy in different frequency bands changes over time, how it mediates transitions between pitch and noise, and how segments are shaped and articulated, consistent with conceptions of *qì* balance.

I then demonstrate that such an approach has a global, comparative application: to Helmut Lachenmann's *Allegro Sostenuto*. Jia studied with Lachenmann, so this similarity is anchored in a concrete historical context. A spectrogram shows that the first section features a varying flow of energy very similar to Jia's. Thus, although the two works' pitch structures stake out distinctive music-cultural identities, I argue that a concept resonant with Chinese culture permits analytically productive connections to both of them. The comparison thus resists the tendency—both in anglophone theory and in China itself—to analyze Chinese modernist music in Western terms.

Ultra-Modernism and the Cosmopolitan Ideal in the Late Music of Carlos Chávez
Amy Bauer (University of California – Riverside)

Widespread recognition of global modernism in music has yet to affect the ontology of "new music" as category, or to challenge the distinctions between musical center and periphery. The appropriation of folk or non-Western material within an art music context may be marked as "exotic" even as it is

lauded as an intercultural contribution to modernism as ideal. Yet the non-European composer who chooses to forgo ethnic signifiers may face censure for ignoring the unspoken rules that shape the cosmopolitan imaginary of our time. As a case study I reflect on the neglected late music of Carlos Chávez as it reflects the fraught historiography of musical modernism writ large.

The abstract language and denial of repetition in Chávez's latter works share in a spirit of "eternal development" that foreshadows that of European New Complexity; they prove as resistant to traditional methods of post-tonal analysis as to the folkloric semiosis that characterized analyses of the composer's earlier works. I position these late works as Chavez's bid to finally be accepted as a cosmopolitan modernist, with all the paradoxical connotations that label implies. Their composition and reception history took place within a cultural framework shaped by the binary opposition of social imaginaries: a continental tradition informed by social theory and Frankfurt school aesthetics versus an Anglo-American positivist ideal. Such competing imaginaries mark the critical, dialectical and self-reflexive character of late modernity broadly, especially in music, where structural abstractions combine with local materialities to reflect the "character of the universal" (Oesch 1981).

TIMBRE
John Y. Lawrence (University of Chicago), Chair

Chord Spacing and Quality: Lessons from Timbre Research
Matt Chiu and Noah Kahrs
(Eastman School of Music)

In describing the opening of Debussy's *La Cathédrale engloutie* as "an open fifth," one strips the chord of its distinct character; although octave equivalence may seem innocuous, listeners often notice spacing more than PC content. To quantify this seemingly intangible quality, this paper extends the Discrete Fourier Transform (DFT) theory of chord quality from PCsets to Psets. The DFT has several common musical uses. Applied to audio, it identifies pitches, but a second DFT can be applied to this spectrum, yielding the "cepstrum" engineers use to describe timbre. In music theory, the DFT measures interval content in PCsets. This paper's model, the pitch-DFT (P-DFT) lies between these approaches, considering note data without octave equivalence. By identifying regularities in P-space, the P-DFT analyzes quality in terms of chord spacing.

This paper has two primary sections: (1) introduction to the DFT and contextualization of its uses in both music theory and engineering; and (2) an analytical vignette of *La Cathédrale engloutie*, demonstrating that an approach using the P-DFT may more closely resemble our perceptual experience. In taking up Hasegawa's (2019) call to "bring concepts from the world of timbre to the study of harmony," this example shows that even basic tonal sonorities can be productively analyzed with methodologies used most often in other domains. By fusing music theory's PCset analysis and timbre research's cepstral methods, the P-DFT succeeds in examining chord spacing, which lies between pitch-class and timbre.

Janáček's Virtual Viola d'Amore
Ethan Edl (Yale University)

Leoš Janáček frequently wrote for the viola d'amore, yet his music demonstrates a dubious understanding of the instrument's unique affordances. What maintained the composer's fixation on this archaic instrument, since none of Janáček's works were performed with a viola d'amore in his

lifetime? While existing scholarship generally begins (and ends) with the instrument's name and the imagery it evokes, I explore some more tangible sources that might shed light on Janáček's use of the viola d'amore, specifically the organ stop of the same name, and the suggestive correlations between the instrument's construction and the composer's idiosyncratic theories of harmony. Close readings of several musical examples reveal a consistent cluster of sonic effects which amplify or exaggerate certain aspects of the instrument, even as the viola d'amore part is paradoxically ill-suited for performance on the instrument itself. Recent scholarship has trained a critical lens on how instrumental technics inform compositional practice (De Souza 2017). As a case study, Janáček's viola d'amore motivates an inquiry into the many forms of knowledge that might structure an encounter with an instrument one does *not* play. To address the gap between the "viola d'amore" in the composer's scores and the viola d'amore as a sounding instrument, I propose thinking of Janáček's viola d'amore as a qualified kind of *virtual* instrument, in the literal sense of emphasizing certain virtues of the instrument. This formulation invites us to attend to the *gaps* in knowledge and productive (mis)readings made possible by naïve encounters with musical instruments.

The Acoustic Properties of Tanya Tagaq's Vocal Sounds as Situated on Timbral Continua
Kristi Hardman (The Graduate Center, CUNY)

Tanya Tagaq is an experimental vocalist originally from Cambridge Bay, Nunavut, who regularly employs Inuit *katajjaq* (throat singing), as well as screams, moans, cries and whispers. Tagaq describes *katajjaq* sounds in two ways: (1) by inhalation or exhalation, and (2) as a low, deep growl or a high, pure pitch. Her description focuses on sound qualities, indicating an importance of timbre in her music. In contrast to the oppositional way that Tagaq categorizes these sounds and the timbral opposition charts of Cogan (1984), this paper suggests that the acoustic properties of Tanya Tagaq's vocal sounds are best situated on a continua of relative values for various acoustic properties, allowing for a more in-depth comparison of the sounds.

Computer-assisted acoustic measurements show noticeable differences between all sounds used by Tagaq. First, I analyze recordings of Tagaq's solo singing with Sonic Visualiser plugins for *RMS energy* (loudness), *periodicity* (noisiness), and *spectral centroid* (brightness). From this data, I establish the central tendency values for Tagaq's sounds using descriptive statistical analysis. Based on this analysis, I construct continua of the acoustic properties of these sounds—a continuum of loudness, of noisiness, and of brightness. These continua provide a nuanced way of describing the subtle, but important, differences between Tagaq's sounds. This exploratory method of analyzing the acoustic properties of musical sounds is not only useful for Tagaq's vocal style but could also be applied to any other music using "extended" techniques where timbre plays a significant role.

BALANCHINE
Maeve Sterbenz (Wellesley College), Chair

Stravinsky and Balanchine's Agon: A Laban Movement Analysis of the Music and Dance
Jacob Fitzpatrick (Saint Paul, MN)

Agon (1957) is a ballet with music by Igor Stravinsky and choreography by George Balanchine. Since *Agon* is as an interdisciplinary, domain-crossing work, one concern is how to address the aural domain of the music and the visual domain of the dance. We also want to address these domains in a way that forms meaningful connections. This paper suggests one such link between music and dance is the concept of *movement*. While we can describe movement in any number of ways, I use *Laban Movement Analysis* (LMA). For the purposes of linking music and dance, LMA is particularly powerful because

its branch of effort addresses not the *bodily* or *spatial* patterns of movement, but rather the *qualitative* ones.

As a case study, this paper focuses on a single dance from *Agon*, the Saraband Step. The first section considers the notion of music as movement. The second section introduces LMA, focuses on the four motion factors attributed to effort (weight, time, space, and flow), and explains how we can hear these elements. Finally, the third section invites us to see and hear how these motion factors interact in a dance. Ultimately, this approach can create a rich listening and viewing experience.

Swingin' Bach in Ballet:
Motivic Development and Funky Rhythms in Balanchine's *Concerto Barocco* (1941)
Kara Yoo Leaman (Oberlin College & Conservatory)

There is an iconic passage near the end of Balanchine's *Concerto Barocco* (1941), set to J. S. Bach's Concerto in D Minor for Two Violins (BWV 1043), in which ten female dancers hop on pointe, first in unison and then in two groups, creating an exciting pattern of visual accents syncopated against the music. This is the climax of a "plotless" ballet that is, nonetheless, about music and movement. To date, the relationship between dance and music in Balanchine's choreography has been studied primarily through the phenomenological lens used in dance studies, wherein dance is understood to be the communication of feeling through symbolic forms. However, in Balanchine's plotless ballet, dance communicates musical ideas rather than feelings.

In this paper, I analyze Balanchine's choreography as patterns of rhythms and shapes. Using annotated videos and choreomusical notation, I show how the choreography features motivic development and funky rhythms, reflecting both Bach's compositional strategy of *inventio* and 1920s–30s jazz musicians' practice of "swingin' the classics." Starting with a close look at the climax, where a cross-modal echo intensifies the audiovisual effect, I widen the lens to trace choreographic and musical elements of that climax in inter-movement motivic connections. In *Barocco,* Balanchine interacts with Bach's score and jazz-music practice not through drama or narrative but through patterns of time and space. This paper contributes to research in music embodiment and multimedia perception, offering a case study that moves beyond binary determinations of cross-modal congruence or incongruence to analyses of interactions in documented patterns.

Rhythm and Meter in Dance as Bergsonian *durée*
Amy Ming Wai Tai (Yale University)

Dancers use rhythmic and metric concepts differently than musicians, and these concepts are often ill-defined in dance-music research. Henri Bergson's philosophy of time, memory, and movement provides a gateway for more nuanced explanations of rhythmic and metric concepts in dance-music analysis. In dance, it forms the philosophical basis for much recent research, as is reflected in how dancers describe their visual and physical experience of rhythm and meter. In music, it has inspired Christopher Hasty's and Victor Zuckerkandl's rhythmic and metric theories based on motion and processual experience.

Building on Hasty and Zuckerkandl, the paper first frames rhythm and meter in twentieth-century dance writings in Bergsonian terms. A beat in dance does not necessarily have discrete beginnings and endings. It encompasses memories and potentials for the body's position is both the result of the previous movement and the preparation for the next. As such, the dancer's view of rhythm and meter can be conceptualized as what Bergson calls *durée*: a continuous flow of states that melt into one another with indeterminate outlines, as memory prolongs itself into the present and becomes potential

for the future. The paper uses *durée* to explicate rhythmic and metric concepts in dance-music analysis, such as accent, phrase, and metrical quality. A Bergsonian understanding of these concepts reveals subtleties in choreography which might otherwise escape notice, and enriches musicians with a visual and kinesthetic understanding of Hasty's and Zuckerkandl's theories.

USING OPEN EDUCATIONAL RESOURCES
FOR INCLUSIVE, FLEXIBLE, AND INNOVATIVE MUSIC THEORY PEDAGOGY
Bryn Hughes (The University of Lethbridge), Chair and Discussant

Music theory pedagogy has recently undergone a reckoning, perhaps best exemplified in Campbell et al. 2014 and Duker et al. 2015. Publications such as *Engaging Students: Essays in Music Pedagogy* and the *Journal of Music Theory Pedagogy* have championed critical pedagogy and, importantly, have presented this work in open-access formats to ensure the latest scholarship is available to all. SMT's 2019 plenary session "Reframing Music Theory" was, for many of us, a watershed moment, galvanizing the need to create a more diverse, equitable, and accessible field for our colleagues and students. Despite this enthusiasm, relatively few teachers are prepared to discard their textbooks. Textbooks released by for-profit publishers are rigidly structured, and the field's dependence on them hinders the creation of a more flexible, inclusive, and accessible curriculum. There are additional limitations with traditional textbooks that impede learning in theory classrooms: (1) they are expensive—a potential barrier for lower-income students and non-college teachers without a large textbook budget; (2) they lack the advantages of an open-access digital format, such as immense customizability or potential for computational pedagogical approaches.

Our alternative-format special session promotes open educational resources (OER) as the cornerstone for building a more flexible, inclusive, and accessible music theory classroom. Through five lightning talks, we demonstrate how we use one particular OER—the new, second edition of *Open Music Theory* (hereafter *OMT2*)—in our effort to dismantle the barriers described above.

In the Trenches Using OMT
Kyle Gullings (The University of Texas at Tyler)

When I adopted the "textbook" *Open Music Theory (OMT)* in 2015, I knew no other instructors making the same leap. As a composer by trade, I felt out of my depth. This first-hand experience informs my talk, which covers the benefits and problems associated with my switch to *OMT*, and describes our panel's improvements in *OMT* version 2 (*OMT2*).

OMT saves students money. Additionally, it is equally as effective as proprietary texts: average semester grades and course evaluation numbers remained steady after my switch to *OMT*. This affirms John Hilton III's 2016 finding that open educational resources (OER) are "comparable in quality to traditional learning resources."

The most significant challenge of *OMT* was the lack of accompanying workbook, which I overcame by authoring 109 assignments and other course documents. *OMT2* includes all these, together with many newly-designed assignments, as its free and fully-editable companion workbook. Another obstacle was the lack of built-in chapter sequencing, requiring a reevaluation of my four-semester curriculum. This problem is addressed in our third talk, "Not Just a Theory…," which discusses community creation of *OMT2* content guides.

In 2017–18, 13% of U.S. faculty used OER in at least one course, up from 5% two years prior (Babson Survey Research Group 2018). Despite their advantages, there are fewer available OER in music theory than in other academic fields. *OMT2* fills this need for theorists, and for the numerous applied

instructors, ensemble directors, and other generalists that often teach theory courses. It is adoption-ready and poised to make a difference in classrooms everywhere.

Supporting AP Music Theory: Open Music Theory's Secondary School Outreach
Chelsey Hamm (Christopher Newport University)

Secondary school AP Music Theory instructors face a myriad of challenges. AP Music Theory courses are often overpopulated, grading intensive, and are sometimes occupied by students who have little fluency in music notation. Additionally, such courses are occasionally allotted little or no funding, leaving instructors to grapple with the ethics of illegally photocopying a desk copy of a textbook, or forcing teachers to pay for textbooks creatively, via parent-led non-profit organizations and even with their own personal funds. Although many collegiate institutions choose not to award non-elective credit for AP Music Theory exam results, these courses remain an important tool in developing successful college music students both academically and artistically.

This lightning talk focuses on many of the unique challenges that AP Music Theory instructors are likely to face and gives an overview of how *Open Music Theory*'s twenty music fundamentals chapters address these needs. Namely, *OMT2* addresses instructors' needs via workbook assignments, interdisciplinary content, and an interactive online format. *OMT2*'s music fundamentals assignments are designed with simple and clear directions, and are meant to read at a high-school reading level. These assignments are frequently interdisciplinary in nature, helping students forge content and skills connections across various subjects. *OMT2* also exploits the interactive potential of clickable webpages. Similarly, multiple short videos designed for high-school and early-college-level students appear throughout the fundamentals chapters. Finally, *OMT2* makes extensive use of hyperlinks to open-access resources and assignments.

Not Just a Theory: How to Put an Egalitarian Music Theory Curriculum into Practice
Megan Lavengood (George Mason University)

Within the widespread efforts to diversity the topics we teach our undergraduates, one model is a modular curriculum, in which theory courses are designed to be taken in any order, rather than in a strict sequence. Theory instructors generally seem enthusiastic about implementing modular curricula and giving students the option to take unconventional courses as part of their core curriculum, but textbooks continue to cater primarily to a conservative, traditional curriculum. My lightning talk demonstrates how to use the collaboratively authored *Open Music Theory* as the primary text for modular courses. *OMT2* contains six sections that go beyond a traditional curriculum: jazz, pop, 20th-/21st-c., counterpoint, form, and orchestration.

Each of these sections has been authored by a specialist in that area. As *OMT2* continues to grow, further sections could easily be added that cater to other unconventional courses. A new potential problem arises with all open educational resources (OER): too much material may make the course material too difficult for an instructor to navigate, especially for adjunct and other under-supported instructors. Fortunately, OER Commons websites (community-based websites like Humanities Commons) provide an ideal platform for creating Instructor's Guides on using *OMT2* for various courses. I will demonstrate how instructors can access OER Commons to find course structures and instructor resources for courses designed to use *OMT2* as their primary textbook. I will also instruct session participants in adding their own courses to *OMT2*'s OER Commons webpage.

Assessing for Retention: Modeling Creative, Multi-Use Quiz Design

Brian Jarvis (University of Texas at El Paso) and John Peterson (James Madison University)

A strength of online, open-source materials is their ability to be flexibly adapted by users to fit their particular needs. While it is increasingly common for print textbooks to include access to an online companion site, those materials are, understandably, closely aligned with the terminology, progression of topics, and pacing of the book they accompany. Lack of customizability can be a hindrance if an instructor prefers to present content in a different order, as later assessments may require students to know terminology from earlier chapters. *OMT2* uses a combination of online quizzing strategies to combine the best of both worlds: alignment and customizability. In this talk, we introduce two categories of quizzes we created for *OMT2*: (1) in-line chapter comprehension quizzes using H5P—an open-source quizzing platform that we will introduce; and (2) customizable quizzes meant to be deployed through a user's Learning Management System (i.e., Blackboard, Canvas, etc.). In both cases, we are focused on developing quizzes that can help students practice not only foundational skills, such as spelling triads and key signatures, but also more complex ones, such as hearing hypermeter or analyzing form. In our presentation, we'll showcase some of the ways in which we've used H5P and our LMSs to develop these quizzes that practice these more complex skills, then we'll work in small groups to brainstorm ways in which we can further leverage the power of these quizzing platforms to create auto-graded practice of advanced concepts for students.

Computational Methods for Augmented Anthologies

Mark Gotham (Cornell University)

We have striven to make *OMT2* a flexible resource, such that teachers and learners in diverse contexts can extract, re-combine, and adapt the constituent parts according to their needs. This modular approach has natural parallels in the computational world's commitment to "soft-coding": working with small parts that can be checked, re-ordered, and re-purposed in myriad ways. This session sets out computational methods for "soft-coding" music theoretic ideas and analyses such that they can be retrieved from a database or score directly for pedagogical uses.

We focus here on the example of harmonic analysis. Musicians have produced harmonic analyses manually for hundreds of years and formalized languages like "figured Roman numerals" for organizing and disseminating their ideas. It is a small step from the establishment of such a language to the definition of a formal, computational standard and from there to flexible re-purposing. This session focuses on automatic retrieval from human analyses for producing large anthologies of examples (thus combining traditional human-curation with digital-age scale) and for making more data-driven and verifiable statements about "general" practice in a particular repertoire context.

Participants will be invited to try out user-friendly methods for encoding analyses (no prior experience required) and thus to contribute to a growing corpus of music theory examples by women as part of a project in association with https://fourscoreandmore.org/ and https://musictheoryexamplesbywomen.com/. We conclude with a brief look beyond retrieval to the automatic generation, comparison, and spell-checker-style "marking" of harmonic analysis for any score (http://roman.algomus.fr/).

JONI MITCHELL
Lloyd Whitesell (McGill University), Chair

Enactive Soundscapes:
Physio-musical and Formal Process in the Music of Joni Mitchell
Peter Kaminsky and Megan Lyons
(University of Connecticut–Storrs)

With a career spanning five decades, Joni Mitchell is one of the most prolific and influential singer-songwriters of our time. Mitchell attributes her unique style and sound in large measure to the use of alternate guitar tunings (AGTs)—over 50 AGTs are found in her 107 guitar-based songs. While recent scholarship by Rockwell (2009), Koozin (2011) and De Souza (2018) has made strides in deploying Neo-Riemannian and Lewinian transformational theory in the "enactive landscape" (De Souza, 2018) of the physical fretboard, a similarly thorough application of such constructs regarding AGTs has yet to be undertaken. Mitchell's music provides a rich canvas to analyze performer-instrument interactions which highlight the degree of physical *affordances* of the "fret-hand" on the fretboard and the direct musical relationships such affordances provide: the concordance of guitar tunings, physical fret/string-space, musical space, and their synthesis into an enactive *physio-musical soundscape*. Of equal significance is how Mitchell articulates formal sections of songs through slight adjustments of left-hand position, creating a smooth system of affordances and emergent chord-shape families that readily demarcate formal boundaries.

Building on work of the above scholars, our tripartite approach to Mitchell's physio-musical soundscape entails (1) a corpus analysis examining relationships between like tunings and chord shapes, (2) musical analysis engaging both physical fret/string-space and musical space, and (3) the incorporation of these findings into structural and hermeneutic analyses.

Metric Freedom and Confessional Performance Practice in Joni Mitchell's "Blue"
Nancy Murphy (University of Houston)

Joni Mitchell's album *Blue* (1971) is lauded as the zenith of confessional songwriting, with lyrics acting as intimate personal documents and songs as vehicles for self-expression. The album's titular track illustrates several techniques of lyrical expression in performance. Lloyd Whitesell explores the role of harmony in reflecting the song's unresolved central relationship, which is "poised between anchored commitment and undone moorings" (2008, 137). But the flexible timing of Mitchell's studio recording—afforded by her self-accompanied performance practice—is also critical to understanding the song's expressive impact. My paper explores this central relationship of "Blue" as expressed through Mitchell's various levels of engagement with metric hierarchy, which vacillate between "anchored" regular meter and moments of lost salience, when hierarchic structures come "undone." For this analysis, I employ a flexible theory of meter (Murphy 2015, forthcoming) that analyzes metric regularity with grid-based theories (particularly Lerdahl and Jackendoff 1983), accounts for reinterpretation with modifications to metric grids (Horlacher 1995), and illustrates loss of meter using projective theory (Hasty 1997). Analyzing flexible meter in "Blue" illustrates the timing freedoms afforded by Mitchell's solo performance practice and how the varying level of metric salience interacts with themes of freedom in her revelatory lyrics. The close connection between metric structure and semantic content in "Blue" suggests that the metric freedoms afforded by Mitchell's performance practice are powerful methods of self-expression in her solo confessional songs.

RECONSIDERING HIERARCHY AND SCHENKER
Jason Hooper (University of Massachusetts Amherst), Chair

Emergent Hierarchies: Harmonic Reduction from the Bottom Up
David R. W. Sears (Texas Tech University)

Using tree diagrams to visualize reductions of the musical surface, Lerdahl and Jackendoff (1983) argued that (1) temporal successions of (primarily tertian) sonorities follow a logical order (or *syntax*); and (2) the stability relations characterizing this syntax apply recursively to produce complex, emergent hierarchies, such that a triad at one level—say, for example, the tonic—nests (or subsumes) sonorities at lower levels—the dominant or predominant. Despite recent strides by the corpus linguistics community to discover potentially analogous organizational principles in natural languages using data-driven methods (e.g., Evert 2009), applications of statistical modeling procedures in music research have yet to gain sufficient traction. Thus, this study considers whether corpus-driven methods can discover (1) the syntactic progressions that characterize a given idiom; and (2) the recursive hierarchy by which certain harmonies are more stable than others.

Redrawing Analytical Lines
Vivian Luong (University of Saskatchewan)

This paper contemplates the lines that animate our work—from music-analytical systems that shape sound into knowledge to the disciplinary divisions that distinguish us. To begin, I theorize these lines with Karen Barad's concept of agential cuts. For Barad, making agential cuts at once produces knowledge (epistemology), constitutes its objects (ontology), and fosters particular attitudes toward them (ethics)—which she expresses with the term "ethico-onto-epistem-ology." Bringing this perspective to music theory, I frame analysis as not only a form of knowing, but also of relating and world-making.

The second half of my paper turns to affective autoethnography in order to account for these latent aspects of analysis. Here, I draw on the collaborative work of Lauren Berlant and Kathleen Stewart to define affective autoethnography as self-reflexive writing on experience, feeling, and space. With their writings as models, I offer five vignettes on the worlds that formed around my Schenkerian analysis of J. S. Bach's Prelude in B-flat minor, BWV 891. These examples depict analysis as a practice shaped by both good and bad agential cuts across a network of bodies.

To conclude, I place my vignettes in dialogue with past feminist and queer interventions in opening our field to diverse identities and perspectives. Through sharing my experiment with autoethnography, this paper asks us to reimagine how to we can write about our acquired disciplinary habits and their effects. In doing so, I hope that we can work toward redrawing lines to construct better worlds.

Schenker's Nodal Points and "the Higher Requirement of Tonality"
Alan Dodson (Mount Allison University)

Nodal points (*Knotenpunkte*) are mentioned in just three of Schenker's analytical writings, all from 1921 to 1923 and all on works by Beethoven: the monograph on op. 101 and the articles in *Der Tonwille* on op. 2/1 and the Fifth Symphony. In these texts, nodal points play an important but rather mysterious role. The concept is purported to clarify certain refractory prolongational boundaries and, in one case, equated with "the higher requirement of tonality," but it is used in several different ways and never clearly defined. I explore this enigmatic and short-lived Schenkerian concept by examining passages

from the three Beethoven analyses alongside theoretical accounts of nodal points from *Kontrapunkt* 2 (1922) and "Freier Satz" (1918–20), an early version of *Der freie Satz* preserved in the Oster Collection.

In *Kontrapunkt*, Schenker mentions nodal points in conjunction with the dissonant passing tone and its relationship to the surrounding consonant intervals. He explains that passing motion gives rise to both end-beginning overlaps and the mental retention of the *Stufe*, thus to both additive and hierarchical means of generating content, both of which are reflected in the Beethoven graphs. Schenker discusses the hierarchical aspect further in "Freier Satz," where he claims the melody's "striding from space to space within a certain chord" guarantees the unity of both the melody and the *Stufe*—a metaphor he would revisit in "Elucidations" (1924) and later writings, now in relation to the global tonic.

POSTWAR TRANSFORMATIONS OF THE AMERICAN COMMON STOCK
Chelsea Burns (University of Texas at Austin), Chair

The musical language shared among Black and white American vernacular musicians, sometimes referred to as the "common stock," underwent profound transformations of musical style and meaning in the postwar era. Musicians explored new approaches to the common stock in response to dramatic changes in American society, including the continued migration of African Americans out of the South, so-called white flight to the suburbs, and heightened nationalism. Discourses surrounding common stock styles increasingly emphasized reductive narratives of American music genres as racially segregated, and as only vaguely attached to the musical styles and approaches of prewar society. While much scholarship has complicated such narratives, including work by Karl Hagstrom Miller and Christopher A. Waterman, the specific strategies of musicians engaging with common-stock sources from the 1950s through the 1970s warrants further exploration.

The papers in this panel combine musical analysis and historical inquiry to examine the ways in which postwar country, rhythm-and-blues, and punk rock styles engaged with prewar common stock resources, including traditional blues patterns, orally transmitted fiddle tunes, gospel musical tropes, and chord sequences such as the passamezzo moderno. Our methodologies blend close musical readings, formal analysis, prototype modeling, and critical reception theory. Together these papers aim to reconsider the performance styles of postwar musicians within these markedly American genres as they refracted their changing social environments. They lengthen the historical range in which postwar American vernacular styles are considered, and widen the lens through which we view American music genres as sharing a single multifaceted and multiracial tradition.

The Transformation of Prewar Blues Into Postwar Rhythm and Blues
Nicholas Stoia (Duke University)

The standard twelve-bar blues, arguably the most productive resource of the common stock, underwent profound transformations in the transition from prewar to postwar popular music. When large segments of the African American population migrated to cities in the years following the Second World War, traditional blues traveled with them—but the new urban environment engendered alternative approaches to blues that reflected the new circumstances, and rhythm and blues emerged as an urbanized transformation of the earlier, more rural genre. As many scholars have observed, rhythm and blues was emphatically energetic and highly electrified, but what has received less attention are the many new compositional approaches that marked the emerging style. In addition to electrification and livelier tempos, rhythm and blues was characterized by faster textual pacing, greater

phrase-rhythmic density, and pervasive elaboration of the twelve-bar idiom, changes that were similarly engendered by the new urban environment. These developments had profound implications for the postwar common stock, because both Black and white musicians forged much of the newly dominant genre of rock and roll from these modern twelve-bar variants. This presentation explores the postwar transformation of the twelve-bar blues through the work of several pivotal rhythm and blues musicians, including Willie Dixon, Ruth Brown, Ray Charles, and Fats Domino.

"Show Me": Fiddle Breaks and Politics in Country Covers of R&B
Jocelyn R. Neal (University of North Carolina at Chapel Hill)

In 1972, country singer Barbara Mandrell covered soul star Joe Tex's "Show Me," remaking the song into a southern stew of soul, fiddle hoedowns, and a final gospel shout chorus combined with a fiddle break. The recording serves as a metaphoric biography of its producer Billy Sherrill, with his complicated career spanning Muscle Shoals to Nashville's country boom period. The recording also offers an opportunity to probe one of the underlying tensions in country music: its indebtedness to a rich blend of cross-racial Southern common-stock elements, yet frequent predictions from cultural gatekeepers such as eminent country music historian Bill C. Malone of the genre's ever-impending demise from the continuation of such blending.

Within that framing tension, this paper examines country covers of soul hits, including "Show Me" and Shirley Brown's "Woman to Woman," to illustrate the impact of soul on country music's vocal styles, specific songwriting practices, and fan reception in the late 1960s and 1970s. The contemporary academic discourse of Diane Pecknold, Charles Hughes, and others lays out the historiography of music industry personnel moving fluidly across country/soul scenes. These analyses enrich that history by cataloging and interpreting the musical artifacts that resulted from those cross-genre moves. Ultimately, these cover songs ended up exposing the dual nature of genre reception: they offered shared musical ingredients but reinscribed genre difference through the deployment of distinctive musical tokens, amplified by the marked racial identities of the performers.

Common Stock Sources of Early American Punk
Evan Rapport (The New School)

Punk was first developed mostly by white American baby boomers as an expression of paradigmatic changes in postwar society, including "white flight" to the suburbs and the continued mass movement of African Americans during the Second Great Migration. Today, punk is considered one of the "whitest" genres of music, although musical analysis reveals close ties to shared common stock sources and styles primarily associated with African Americans. Initial intimations of the punk style came from musicians in the late 1960s and early 1970s such as the Stooges and the MC5 who were heavily engaged with Black music. Early American punk musicians such as the Ramones and Blondie drew on a range of common stock sources, with a particular focus on the uses of common stock resources in the music of the late 1950s and early 1960s of their childhoods, such as doo-wop. Early American punk rockers especially articulated a complicated relationship to Black music, sometimes reinforcing and sometimes obscuring the connections, and punk's critics further severed ties between punk and its multifaceted musical past. The result was a tension between punk's musical genealogy and narratives about punk's whiteness, and the ambiguities surrounding whiteness and blackness in punk became a core element of the style. Placing the compositional choices and performance styles of early American punk musicians in the specific context of the racial landscape of the 1970s sheds new light on that era and its contemporary importance, especially for formations of American whiteness that persist today.

CLARA AND ROBERT SCHUMANN
Stephen Rodgers (University of Oregon), Chair

Entextualization in Clara Schumann's Nineteenth-Century Pianism
Andrew Malilay White (University of Chicago)

How did pianists of the nineteenth century practice for improvisation, and how can their ways of practicing affect our view of musical texts and works? This paper develops an entextualization framework to describe how Clara Schumann assembled her musical materials in the mid-nineteenth century. Entextualization, a concept from the work of Michael Silverstein and Gregory Urban in linguistic anthropology, is used to describe how portions of discourse are adapted and treated as objects in new contexts—how utterances "become text" within a broad view of what Kristeva and Barthes called "cultural text." This paper establishes a theoretical framework centered not around works or their composition, but rather built upon the specific "passage"-based practice method used by Friedrich Wieck and Carl Czerny. The framework is then used it to model Clara Schumann's improvisatory and compositional process, showing how she alters not only her musical materials (as practiced "passages") but also her fashioning of her own image as a performer. Schumann's *Caprices en forme de valse*, op. 2 (1832) is analyzed, as well as a sketch of one of her improvised preludes notated late in her career.

Midcentury piano repertoires, I ultimately argue, are well served by a decentered theory of musical creation based on entextualization and bodily skill. Such a theory would illuminate aspects of music-making that are missed by theories that prioritize musical works and hermeneutic interpretations. This makes vivid Barthes's claim that "text is experienced only in an activity of production" (1988).

Beyond Vierhebigkeit:
Phrase Structure and Poetic Meaning in Three Lieder by Clara Schumann
Julie Pedneault-Deslauriers (University of Ottawa)

This paper illuminates various creative formal and phrase-rhythmic strategies devised by Clara Schumann that demonstrate her refined approach to phrase construction and text-setting. Though some scholars have noted a certain "squareness" that pervades Schumann's music, I argue that this regularity often conceals deeper levels of complexity. In three analytical vignettes, and building on recent studies applying Caplinian form-functions to vocal music (e.g. Krebs 2015; Rodgers 2017; Schmalfeldt 2011), I demonstrate how Schumann overlays formal deviations, intricate textural patterns, and colorful harmonic twists in order to complicate the apparently uniform surfaces. "Der Mond kommt still gegangen" and "Die gute Nacht," for instance, illustrate how Schumann blurs phrase and hypermetrical boundaries and problematizes form-functional determinations; while in "Beim Abschied," the composer cleverly hides voice-leading symmetries and shifts harmonic focal points away from their expected placements. Finally, I discuss how these phrase-functional techniques compound the explicit meanings of the song-texts. Schumann's apparently "square" structures, in sum, often act as revolving doors into original and powerfully expressive formal designs.

Parenthetical Insertions and Ellipses in Robert Schumann's Eichendorff *Liederkreis*
Alexander Martin (Stetson University)

Many theorists have investigated how composers express tonal archetypes using expansions (e.g., internal repetition or interpolation) and contractions (e.g., omission or elision). However, the matter

is seldom approached from the perspective of text-setting. How do composers use these techniques to highlight ideas, imagery, or atmosphere in texted music?

I explore this question by investigating text-music correspondences in Schumann's op. 39 *Liederkreis*. A novel feature of my approach is that I argue for the existence of stock musico-poetic pairings, which I call *correspondence complexes*. By considering individual correspondences as inter-related under the aegis of various text-musical *topoi*, my approach addresses Agawu's long-standing criticism that musico-poetic analyses are "one-off" and "ad hoc" (1999).

I show how musico-poetic meaning may arise in Schumann's songs when textual elements are coordinated with one of two categories of musical elements. In the first case, the correspondence involves extraneous material that is added in some way to the underlying tonal framework (i.e., something that *shouldn't* to be there—but *is*); in the second, the correspondence involves tonal material that is implied or conceptually present, albeit unrealized or else literally absent in the score, (i.e., something that *should* to be there—but *isn't*).

ROLES AND ETHICS IN THE PEER-REVIEW PROCESS
Sponsored by the Professional Development Committee
Nicole Biamonte (McGill University), Chair and Moderator
Jennifer Iverson (University of Chicago), Christopher Segall (University of Cincinnati College-Conservatory of Music), and Joseph Straus (The Graduate Center, CUNY), Panelists

The intended focus of this panel discussion is the ethics governing the interactions among authors, editors, and reviewers in the anonymous peer-review process. Our larger goal is to provide a reminder to the Society's members, as they participate in this review process, of the humanity of individual scholars and the collaborative nature of author/editor/reviewer relationships even as their transactions are conducted at-arm's-length.

The session will begin with a short introduction and orientation to that process: how the double-blind system works, the roles of editor and reviewer, the revise-and-resubmit process, and so forth. Following this, a panel of scholars with overlapping experiences as authors, editors, and reviewers will share advice and perspective about the ethics and dynamics of this set of relationships. Issues to be discussed include the editor's role in representing/transmitting reviewers' responses (especially in the case of negative and/or antagonistic reviews) to the author; strategies that are helpful in writing a civil, negative review; and advice for authors when receiving and reacting to negative (or antagonistic) reviews. The discussion will include consideration of questions posed by members of the audience and by panelists to one another.

Ultimately, this session should serve as a signal to all members of SMT of the Society's advocacy for collegiality among those participating in the process of forging peer-reviewed work.

THE SOUND OBJECT AND MUSIC MEDIA
Sponsored by the Ams Music and Media Study Group/Smt Film and Multimedia Interest Group
Kate Galloway (Rensselaer Polytechnic Institute)

By listening across sound media -- the many objects, materials, bodies, and technologies involved in music making and listening -- serious attention is paid to media that is not clearly musical. The aurality and materiality of sound documents is inscribed into the ecologies of performance and the narratives we craft about music cultures. This series of lightening talks collectively address the objects, things,

material culture, and technologies of musical performance, circulation, consumption, and perception. Sound documents are multimodal: audiotape, film, typed transcripts, handwritten posters, artist books, personal diaries, radio programs and transcripts, maps, album covers, instruments, hard drives, and more. This roundtable asks, how musical sounds, practices, and meanings inform and are informed by relationships between musicking people and musicking things. This roundtable is concerned with fostering an awareness of the materials, objects, and things used to create and experience music, where they come from, and where they end up in the ecology of performance. We will collectively examine the relationships among musical objects, music, musicians, and media.

SUBSTANTIAL SIMILARITY AND THE ROLE OF FORENSIC MUSICOLOGY IN MUSIC COPYRIGHT LITIGATION

Sharp Contrasts on "Blurred Lines": *Williams v. Gaye* and a Clash of *Amici*
Andre Redwood (University at Albany, State University of New York)

Among recent music copyright cases, few have received as much public attention or provoked as much debate as *Williams v. Gaye*. The case, which centered on an infringement claim by Marvin Gaye's estate against Robin Thicke's controversial hit "Blurred Lines," concluded in 2018 with the Gayes prevailing. Yet debate is sure to continue for a long time to come: the case ended in a split decision, and recent court filing by the Gaye family claiming that Williams perjured himself all but guarantees that the conversation around "Blurred Lines" is far from over.

Several *amicus curiae* briefs were filed in connection with the case. Among them, two offered opinions, on opposing sides, of expert "musicologists" concerning the expert testimony that was presented. Both were joined by some of our profession's most visible and distinguished music theorists, musicologists, and ethnomusicologists, and articulate sharply different positions with respect to the testimony provided by the Gayes' musicological expert witnesses, Judith Finell and Ingrid Monson. The Thicke *amici* contended that this testimony was misleading on the one hand, and irrelevant on the other (Thicke Amici, 1-3). The Gaye *amici* argued that the testimony was "fully consistent with the accepted Musicological standards and methods" (Gaye Amici, 1) and attacked the Thicke amici's analysis as little more than "an interminable catalogue of nits, ornamentations and other insignificant variations" (25). Intriguingly, the *amici* seemed to fall along familiar disciplinary lines: in general (and with notable exceptions), the Thicke *amici* had a markedly higher representation of music theorists, the Gaye *amici* a markedly higher representation of musicologists or ethnomusicologists.

This paper revisits this dispute among experts without the adversarial frame in which it was initially cast, and inquires whether and to what extent ideas about similarity in music-and, more broadly, about the proper scope and application of copyright-reflect disciplinary orientation. Insofar as this is so, the umbrella term "musicologist," which courts have tended to use without regard for disciplinary specialization, brings to these public proceedings a misleading connotation of objective neutrality.

Searching for Similarity: Confirmation Bias in Partisan Forensic Musicology
Dana DeVlieger

Throughout the twentieth and twenty-first century, regulations on expert testimony have sought to minimize the impact of disagreeing experts. Yet, as seen in recent cases like *Williams v. Gaye* (2018), *Skidmore v. Led Zeppelin* (2018), and *Gray v. Perry* (2019), disagreements between forensic musicologists still play a large role in contemporary music copyright decisions. This paper suggests that the

disagreement between partisan experts is due, in part, to confirmation bias rather than ethical or financial allegiance. Confirmation bias is defined as "a cognitive tendency to search for and evaluate information in ways that are partial to an already formed hypothesis" (Lidén, Gräns, & Juslin 2018). It has been observed in fields such as cognitive psychology (Rajsic, Pratt, & Wilson 2015), economics (Charness & Dave 2017), legal studies (Lindén et al. 2018), and forensic science (Moser 2013). Investigating confirmation bias in music analysis can shed light on challenges in both forensic musicology and the broader field of music scholarship.

Because music analysis is a subjective act rather than an objective one, there is certainly risk for confirmation bias in forensic musicology. An expert hired by a plaintiff, or the party alleging copyright infringement, may start their analyses by searching for similarities between two works. For example, during her deposition in *Williams v. Gaye* (2018), expert witness Judith Finell explained her analytical methodology: "I listen to the two recordings and determine what if anything sounds related and similar between them, and if I identify certain elements then I usually have to provide a transcription of those particular elements or portions of the music. And then I compare those transcriptions" (Finell deposition 2014). On the other hand, an expert retained by the defendant, or the party denying infringement, may start their analysis by searching for differences. Given the multiple musical components present in even the "simplest" musical work, both starting points will lead to valid observations about the work, allowing for expert disagreement. This paper proposes that appointing a panel of third-party musicologists to conduct forensic analyses from a neutral starting point could minimize the effect of confirmation bias in such cases.

When Analysis is Performance, What Ethical Guidelines Must Forensic Musicologists Consider ?

Devin Chaloux (Indiana University)

Kofi Agawu (2004) responded to Joseph Kerman's (1980) critique of music analysis by stating that "analysis is most productively understood and practiced as a mode of performance and as a mode of composition" (273). In Agawu's hunt for the meaning of Adorno's "truth content," he comes to the conclusion that "the truth content is not necessarily a literal, empirical truth but rather a dynamic, motivating truth designed partly to anchor listening in specific sociocultural and historical moments even while…releasing the analyst from the dubious responsibility of having to establish the authenticity of the analysis." In other words, analysts do not engage in empirical truth finding when analyzing music.

Recent court cases (*Williams v. Gaye* [2018], *Gray v. Perry* [2019]) have shown how competing testimony from forensic musicologists creates confusion for the jury tasked with ruling on copyright infringement. As Booth (2016) states: "Chief among the typical problems is that experts [forensic musicologists] will often aggregate their objective findings to arrive at a subjective conclusion that is outside the scope of their duties as an expert" (123–24). While certain aspects of a musical work are objective (such as the key and time signature), most debates about "substantial similarity" inside the courtroom ask forensic musicologists to engage in interpretation of subjective musical elements. But as Booth noted, this is outside the scope of the expert witness within the courtroom. Debates over these subjective musical elements and their impact on "substantial similarity" often leads the judge to declare a "battle of the experts" and let the competing testimony be heard in trial. Such "battles" often confuse the layman jury and offer little help in resolving the case.

In exposing the paradox between the act of analysis and the role of an expert witness, this paper suggests ethical guidelines for forensic musicologists to consider when testifying in a case. Through

neutral language, emphasis on objective musical elements, and clear indication of subjective interpretation, forensic musicologists can navigate the ethical minefield of the paradox between music analysis and expert testimony.

Melody, "Beats," and Minimalism: Protectability in Contemporary Popular Music
Alexander Stewart (University of Vermont)

Even when there is little dispute over the similarity of the musical expression at issue in a copyright case, disagreements inevitably arise over its substantiality. Legal precedent has established that musicological analysis focus on the relative importance of the contested musical expression to the original composition, rather than the allegedly infringing work. For example, in *Newton v Diamond* (2003) a three-note sequence that appeared once in the original work was deemed *de minimis* even though it was "looped" throughout an entire Beastie Boys' song. In this later work, the resulting ostinato would not have been dismissed as insubstantial.

In infringement matters, when enlisted as experts to provide comparative analysis, musicologists are asked to opine on the quantitative and qualitative significance of the similar expression. But how does substantiality analysis play out in works that contain little in the way of foregrounded melodic content? Does the traditional melocentric approach in copyright that prioritizes melody, and, to a lesser extent, harmony, rhythm, and form, become less relevant? In hip hop and rap, for example, the lead vocal resists transcription of definite pitch sequences basic to melodic analysis. Harmony can be minimal or non-existent. As regards structure, the only differentiation of the chorus or "hook" from the verse may be the return of a lyric referencing the song's title.

This paper looks at several contemporary pop songs and the sparse texture of their underlying tracks or "beats" before turning to a recent highly publicized case, *Gray v. Hudson* (2019). Here a jury found that singer Katie Perry's song "Dark Horse" infringed on a Christian rapper's work "Joyful Noise" by using a similar ostinato based on six notes of an eight-note pattern containing only three different pitches. I examine several instances where vocalist/songwriters unsuccessfully attempted to assert infringement based on similarities in rap vocals. I conclude by discussing whether "Dark Horse" and other recent cases signal a lowering of the bar for protectability in music copyright. If there is a new threshold, is it a product of our litigious environment or could standards be changing as minimalist textures become more prevalent in hit songs?

Can You Copyright a Chord Progression?:
Evaluating Harmonic Similarity in Federal Copyright Litigation
Katherine Leo (Millikin University)

When comparing musical works in a federal copyright lawsuit, putative similarities between original elements of each work are often legally treated as more indicative of copying. In cases heard since the mid-nineteenth century, such emphasis on originality has led to case outcomes that hinge on melocentric comparisons. Although often necessary, bass line melodies and chord progressions instead serve a more contextual role, being legally treated as unoriginal, and thus unprotectable, musical building blocks. Yet in some cases, these elements have proven critical to defining the essence of a copyrightable work or the musical style of its creator(s). Balancing these seemingly opposite interests raises a perennial question in music copyright: can a chord progression be copyright protected?

Contemporary lawsuits have presented circumstances in which chord progressions might constitute copyrightable subject matter. After a gloss of federal copyright jurisprudence surrounding the

contours of similarity analysis, this presentation surveys available court records from cases in which chord progressions became a significant point of forensic comparison as conducted by musical expert witnesses. For most of the twentieth century, judges presiding over such cases dispensed with harmonic discourse, instead determining legal outcomes based on melodic and formal grounds. Yet in two more recent cases, chord progressions have been considered legally original enough to be copyright protectable. In *Tempo Music v. Famous Music Corp* (1994), the Billy Strayhorn estate successfully staked claim to earlier copyright registrations for the Ellington Orchestra standard, "Satin Doll," based on Strayhorn's contribution of the song's distinctive chord progression. Although still on appeal, in *Skidmore v. Led Zeppelin* (2018), a chord progression could be considered original when analyzed in the context of its bass line. In both cases, forensic musicological analysis prepared by experts provided critical evidence to separating original melodic and chordal elements from unoriginal harmonic practices.

Through its interdisciplinary investigation, this presentation emphasizes the subjective nature of copyright infringement and the impact that originality of chord progressions can have on assessments of similarity and copyrightability. In so doing, it highlights the evolving nature of music copyright and the significance of forensic musicology on analysis of music as intellectual property.