

Friday, May 15

9:15–10:45 SYNTAX, AFFECT, AND COGNITION

Chair: Lawrence Zbikowski

What is Musical Syntax? An Evolutionary Perspective
David Bashwiner, University of Chicago

It is common to speak of there being a “syntax” in music, but much less commonly is this term defined. In its linguistic sense, “syntax” invokes the notion of lexical category (e.g., noun, verb, adjective). Musicologists generally agree that there is no musical parallel to lexical category. Yet “order” (*taxis*) is clearly important in music—causing the same C major chord, for instance, to sound as a dominant in F, a subdominant in G, and a flat sixth in E. Music is literally, then, “with order.” It is this intuition that leads theorists to claim—correctly, I believe—that musical utterances are syntactic. Nevertheless, without a proper understanding of what “syntax” is, describing music as such carries little theoretical weight.

The comparison with language is problematic largely because of the fact that, in both music and language, syntax is already *speciated*. What is needed is a *general* theory against which to compare both. I argue that such a general understanding can be arrived at by means of (a) a comparison of the syntactic behaviors used communicatively throughout the animal kingdom, and (b) a consideration of how syntacticity functions within those communication systems. Much communication, human or otherwise, is nonsyntactic (e.g., crying, cooing, gesturing, laughing). Syntacticity affords a certain set of benefits *above and beyond* those afforded by nonsyntactic communication, but evolutionary pressures would presumably be required to bring them about. Evolutionary theory thus offers one way of accounting for what musical syntacticity is, how it functions, and why it emerged.

Theorizing Musical Affect: Arvo Pärt’s *Passio* (1982)
Arnie Cox, Oberlin Conservatory

This paper theorizes the role of mimetic motor imagery (MMI) in the generation of musical affect. MMI is imagery related to muscle activity performed in imitation of some seen and/or heard action. It occurs most often in contexts of observing other humans in real life, athletics, and the performing arts. While it occasionally manifests in overt mimetic behavior, as when we sing along with or dance to music, MMI most often remains covert and nonconscious. MMI is a form of physical empathy that contributes a physical feeling to musical experience. This feeling takes the form of partly reinstated body states, which theoretically involve not only activation of skeletal-motor systems but also associated systems that contribute to affect. Excerpts from Pärt’s *Passio* demonstrate the relation between the acoustic fact (objective/structural features), mimetic engagement, and affective (subjective) experience.

The analytical approach takes musical meaning to emerge in subjective and intersubjective responses to objective features, where meaning is motivated by and ultimately grounded in embodied experience. MMI is presented here as one of eight factors contributing to musical affect. Among the implications, this approach fleshes out the roles of expectation and anticipation by characterizing anticipated events as anticipated *actions*, performed by performers and mimetically performed by listeners.

Temporal Segmentation and Prototypical Phrase Models
Mitch Ohriner, Indiana University

The literature on categorization presents two views of category formation, the classical and the prototypical. In the classical view, elements belong to categories by virtue of meeting a set of necessary and sufficient conditions. In the prototypical conception, objects can resemble the prototypical instance of a category, or even multiple categories, and hence the boundaries of categories are fuzzy.

In the work of Schoenberg and Caplin, musical phrases are categorized using the classical model. Yet many phrases do not fit the conditions of traditional categories. In a prototypical conception of phrase structure, all phrases could be probabilistically placed in all categories, but in order for such a conception to be adopted the criteria used in category formation must be uniform and measurable. This paper proposes a method of using expressive timing in performance to determine a “temporal partitioning” of a piece that can then be fit to a small number of phrase categories. The goodness of fit between a number of phrases and a single fitting model creates a spectrum of association analogous to a prototypical conception of phrase categorization.

Often the results of the method match our intuitions of phrase structure, but just as often they do not. In a demonstration using two of Chopin’s Mazurkas, associations between phrases dissimilar in many respects are revealed. In the larger context of musical scholarship, the method has the advantage of prioritizing interpretation in analysis and where possible giving the highest priority to the most widely held interpretations of musical structure.

Middleground Motives in Beethoven's Last Quartet (Opus 135)
Jason Britton, Luther College

Most of the published analytical commentaries on Beethoven's last complete composition, the String Quartet in F major, op. 135, approach the work more or less exclusively from a motivic standpoint. This is not surprising, given the curious motivic epigraph Beethoven attached to the quartet's final movement. Arnold Schoenberg (1941), Rudolf Réti (1951), Deryck Cooke (1963), and Christopher Reynolds (1988) have all praised op. 135 for its highly unified motivic structure. But what are we to do when the details of one motivic reading opposes another? Or what if a particular reading contradicts the way we might understand a passage aurally (as when the proposed reading conflicts the music's harmonic-contrapuntal structure)? What criteria should we use to evaluate a motivic analysis? Clearly, we need a strategy that will help answer these questions and advance us beyond mere intuition. The position taken here echoes John Rothgeb's argument that "proposed thematic relationships must bear scrutiny in the light of the Schenkerian theory of structural strata" (1983, 42). A Schenkerian approach is adopted to help assess existing motivic readings of op. 135 within the requisite contexts of harmony and voice leading. The method is then used to generate a methodologically consistent, hearable analysis that reveals motivic relationships that reside at deeper, hidden levels of structure.

The Myth of Modulation: Motivic Unity Across Surface-Level Keys in *Ein Heldenleben*
Soo Hyun Jeong, University of Minnesota – Twin Cities

Richard Strauss's *Ein Heldenleben* presents a dramatic musical program whose excitement rests in no small part on rapid, chromatic key changes. Despite the frequent and varied types of modulation, we can still detect an underlying monotonal logic to this dizzying array of keys. Behind the seemingly unpredictable key changes lies a sense of continuity granted by an underlying $\hat{5}-\hat{6}-\hat{5}$ or $\hat{5}-\hat{6}-\hat{5}$ skeletal melodic gesture. The usage of this gesture allowed Strauss to achieve coherence in *Ein Heldenleben* by repeating the same harmonic idioms on both the musical surface and on hierarchically deeper levels, a technique he also applied with some success in later works. Analytically, our recognition of this recurring gesture helps us to explain how Strauss expressively unites a variety of harmonic and thematic elements throughout one composition.

To support this claim, my study comprises the analysis of a variety of both harmonic progressions and modulations. I take into consideration surface-level harmonic progressions as well as deeper-level relationships between local key areas, showing how a monotonal interpretation of the melodic scale degrees provides a sense of unity. My analytical approach is influenced heavily by Daniel

Harrison's thoughts on modulation. Harrison's analysis creates a chronological key travelogue of *Ein Heldenleben*, using the Riemannian *Tonnetz* as a sort of tonal map. The strength of this analysis is that one may clearly recognize both the variety of the harmonic motions and the entire conceptual group of keys applied throughout the piece. My approach differs from Harrison's, however, in that rather than relying on Riemannian conceptions of tonality and modulation, I use Schenkerian concepts and methodology, an approach more appropriate for distinguishing hierarchical levels of tonal structure. This kind of analysis will effectively show that new key relations in *Ein Heldenleben* follow from the recursive counterpoint of the central $\hat{5}-(\flat)\hat{6}-\hat{5}$ gesture. Moreover, my analyses illustrate how the skeletal thematic motions continuously seep up from the background, eventually saturating the foreground.

Voice Leading and Emerging Consciousness in a Schoenberg Passage
Christopher M. Barry, University of Wisconsin – Madison

A remarkable passage in the sixth song of Arnold Schoenberg's *Das Buch der hängenden Gärten*, Op. 15 (1908–09), "Jedem werke bin ich fürder tot," forms an elegant parallel of emerging human consciousness through the singular details of its voice leading. The passage crystallizes in a fleeting moment coinciding with the singer's enunciation of the verb "weinen" (to weep). The harmonic simultaneity of this moment is striking in comparison to its predecessors. Though it putatively simulates an E major triad, there is nothing "E-ful" about the *Weinenklang*: it is a groundless, harmonically impoverished product of a distinctly non-tonal voice-leading process.

This paper expands on and formalizes the voice-leading process in this extraordinary passage with reference to remarks from Schoenberg's *Harmonielehre* (1911) and Roeder's (1989) commentary on those remarks. I then interpret the voice-leading process within the framework of a human subject emerging into consciousness, a framework based on the music-theoretical work of Michael Cherlin (1993) and the neuroscientific work of Antonio Damasio (1999). For this song, a specifically Freudian interpretive model parallels the processive formation of a totalistic, consolidated sonority through voice leading. The *Weinenklang* disrupts the poetic meter and sensual proclamations of sexual desire—actions consistent with an egoistic, repressive agent. The coincidence of the voice-leading process's termination, the remarkable *Weinenklang*, textual disruption, and the act of weeping is not happenstance: together they illuminate the human subject of the song, a consciousness emerging through emotion, through what Damasio might call the "feeling of a feeling."

Brahms *oder* Dietrich? An Analytic Perspective on the Piano Trio in A Major
Ryan McClelland, University of Toronto

Debate continues over the authenticity of a piano trio in A major discovered in 1924 by Ernst Bücken and published as a work of Brahms in 1938 by Breitkopf & Härtel. The score's preface clarifies that the attribution rested entirely on "internal stylistic evidence"; the manuscript was in an unknown hand (presumably a copyist's), the title-page was missing, and paper studies gave no profitable information. The manuscript has since vanished.

Several authors have offered opinions on whether Brahms composed this trio and when he might have done so. While early writers such as Bücken, Friedrich Brand, and Richard Fellingner, supported a Brahms attribution (c. 1853–54), nearly all recent writers—including George Bozarth, David Brodbeck, and Michael Musgrave—have questioned this. Most offer no alternative, but Brodbeck proposes Albert Dietrich. The only recent author fully in accord with the Brahms attribution is Malcolm MacDonald, but he suggests a date of 1856.

This paper views the trio from an analytic perspective, something that many of the aforementioned writers have signaled as necessary to advance the authorship debate. Since Dietrich's name has repeatedly surfaced in discussions of this trio, this investigation involves both early works of Brahms and the instrumental music of Dietrich. While no analytic inquiry can provide completely conclusive proof of Brahms's authorship, this paper demonstrates that the trio is very consistent with Brahms's early style (c. 1852–53) and inconsistent with Dietrich's compositional language.

"Shall I Find Aught New?" The Expressive Potential of Modified Strophic Form in the
Songs of Amy Beach

Victoria Malawey, Kenyon College

Despite the seemingly uncomplicated surface of some of Amy Beach's songs, many comprise sophisticated harmonic and formal structures. Composed in the late Romantic tonal style over her entire career, many of her songs feature unusual formal designs situated somewhere between modified strophic and through-composed form. This study examines formal modifications in five songs by Beach published over a span of 25 years, and seeks to answer the following questions: In what ways do strophic modifications affect listeners' perceptions of form and textual parallels? To what extent does the degree of modification impact perceptions of new material or variation of previous material (restatement)? Finally, how do Beach's formal modifications impact the range of expressivity in the song texts?

The focal example of this presentation, "Ah, Love, but a Day" (op. 44, no. 2),

demonstrates a complex manifestation of strophic principles because the elements that recall similarity continually shift. Different listening strategies can allow listeners to experience the song as either modified strophic or through composed. Most strophic qualities emerge in the area of melody, where a combination of scale-degree function and absolute pitches are kept intact between strophes.

Comparisons of Beach's scores with analytic re-compositions illustrate the productive gap between strictly strophic designs in the latter and heavily modified strophic forms in the former. Beach uses such modified designs for dramatic effect, often enhancing emotive aspects of the song texts. Different combinations of elements delineating change correspond with different emotive effects in the songs.

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

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

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

Chair: Shersten Johnson

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

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

Functional and Descriptive Accounts of Timbre
William O'Hara, University of Wisconsin – Madison

In the discussion of *Klangfarbenmelodie* that closes his *Harmonielehre* (1911), Arnold Schoenberg waxes poetic about the sublimity that harnessing and systematizing timbre would bring to music, saying that it could "bring us closer to the illusory stuff of our dreams." However, explorations of timbre's organizational and expressive potential are rare in subsequent musical literature. This could, perhaps, be attributed to the lack of a systematic theory with which to describe the phenomenon of timbre in music. While it is difficult to deny timbre's expressive power, it is even more difficult to quantify and explain the modes through which this power operates. Several obstacles hamper our understanding of timbre. It is imprecisely defined and eludes measurement on any existing spectrum, making comparisons difficult. The great diversity of possible timbres and the extra-musical associations they often carry present a daunting mountain of data through which to sift.

This paper argues that existing conceptions of timbre can be split into two categories: descriptive and functional. *Descriptive* accounts are found in musical writings of all kinds, from orchestration treatises to music reviews. *Functional* accounts, such as those undertaken by Wessel (1979) and Lerdahl (1987), seek to describe timbre as an element that can be varied in musically significant ways, through operations such as intensification and combination. Both have their place in musicological scholarship. This paper posits that advancing our understanding of timbre will require researchers to combine these two approaches, and suggests possible avenues for such combination.

Rap and *Sprechstimme*: Analyzing the Pitch Content of Hip-Hop
Christopher Segall, City University of New York

There is a longstanding assumption that pitch plays no role in rap music. Existing scholarly transcriptions render rapped lines in rhythmic notation only, implying that any pitch variation is merely incidental. By contrast, I contend that the way rapped lines are pitched constitutes an important component of many songs. Furthermore, I propose using a pitch-sensitive notation, based on Arnold Schoenberg's *Sprechstimme*, in rap transcription.

Existing transcriptions have used one of two methods for notating rapping. In the first, Western classical notation conveys rhythms on an unheighted staff; the second, developed by Adam Krims, conveys rhythms with Xs placed in a metrical grid. Neither method accounts for the role played by pitch. Every syllable of speech, whether spoken or rapped, has some pitch, even if it is not sustained as in singing. *Sprechstimme* notation, designed for vocalists who must pitch their *spoken* voices, can approximate the pitches of rapped syllables in transcription.

In this paper, I illustrate how pitch functions in rap music. On the one hand, pitch contributes to the formal organization of songs, for instance allowing repetitions of choruses to sound alike. On the other, pitch accent plays a significant role in what Krims calls "percussion-effusive flow," a style of delivery characterized by internal rhyme and polyrhythm. Pitch is used to reinforce these rhythms. Ultimately, I conclude that pitch plays a greater role in rap music than previously thought.

Incorporating Keyboard-Based Mastery Learning into the Music Theory Curriculum:
Two Studies

Leigh VanHandel, Michigan State University

This poster reports the results of two studies that implemented a mastery-learning model of keyboard instruction into a freshman-level music theory course to determine whether the kinesthetic activity of producing harmonic progressions at the keyboard helps students improve their written music theory skills. The hypothesis was that if the kinesthetic reinforcement of the keyboard modules had a positive effect on participants' understanding of the material, the participants may have seen an increase in performance on regular course assessments when compared to the control group members.

A pilot study indicated that students who were at risk in the course (those performing at 75% or below) benefited the most from the inclusion of the keyboard modules. In fact, the performance of the low-achieving participants became statistically indistinguishable from the performance of the higher achieving control group members. This follows the findings of Kulik, Kulik, and Bangert-Drowns (1990), who found that the lowest level of student is the most likely to benefit from a mastery-learning approach.

The experiment design also tested whether students retained the benefit from the mastery-learning keyboard modules; results indicate that the at-risk participant group continued to outperform their control group counterparts even after the two units that included the modules.

The poster will present results from the pilot study and a second study, run during Spring semester 2009, and will provide suggestions for incorporating keyboard-oriented learning into existing curricula that do not have an integrated keyboard skills course.

Barbershop Quartets in the Sight Singing Class

Bruce Taggart, Michigan State University

Teaching sight singing is an important assignment given to the undergraduate aural skills teacher. Musicians should be able to sing comfortably at sight any melody they encounter in a performance, teaching, or academic setting. But as with all skills, learning to sing at sight requires time and extensive practice.

This poster presents the use of barbershop quartets as a teaching tool in the second-year aural skills class. For the past five years, the fourth semester class in a four-semester sequence in the College of Music at Michigan State University has used the quartet collection *Barbershop Jubilee* (arr. Charles Boutelle) as a required text.

Barbershop singing offers an increased awareness of singing mechanics, a first opportunity for many to sing in a choral setting, lightly chromatic harmonies

that provide opportunities to drill basic chord labeling skills and apply concepts from the written theory class, and, not least, a hugely enjoyable singing activity that can serve as a great motivator in what can be a frustrating and less than exciting class.

Several quartets from the collection are discussed, looking at problems in performance, and offering ways of making connections with concepts from written theory, including chromatic harmony, harmonic prolongation, modulation, and the phrase model.

The use of barbershop quartets can be an effective teaching tool, improving basic singing and sight reading skills, strengthening analytical skills, and giving students a chance to sing in a choral setting, perhaps for the first time.

2:00–4:00 JAZZ PLUS

Chair: Ramon Satyendra

Ellington the Improviser: Group Interaction in the *Money Jungle* Recordings
Garrett Michaelsen, Indiana University

This paper will focus on Duke Ellington as a jazz improviser through the investigation of one particularly intriguing recording session. His 1962 *Money Jungle* recording date brought together the diverse and individualistic talents of Ellington, Charles Mingus, and Max Roach for a session that was at turns brilliant and bewildering. Ellington wrote that recording his composition “Fleurette Africaine” was “was one of those mystic moments when our muses were one and the same.” However, other cuts such as the title track “Money Jungle” display palpable musical friction between the performers. Through detailed transcriptions of these two recorded performances, I will draw into the analytical picture the element of musical interaction that is so compelling in this session. I develop an interactive analytical framework that draws on the work of scholars such as Robert Hodson, Ingrid Monson, Jeff Pressing, Ed Sarath, R. Keith Sawyer, and Paul Steinbeck. Through this analytical framework I characterize interactive connections as either associative or interruptive continuations of preceding improvised utterances. Additionally, I describe a spectrum of interactive convergence and divergence, where both poles function as unstable boundaries between which most improvised interaction occurs. The analyses of “Fleurette” and “Money Jungle” will identify convergent and divergent elements of both, painting the total interactive picture not in black or white but in shades of gray.

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

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

While several theorists have analyzed metrical dissonance in jazz (e.g. Larson 2006, Downs 2002, Waters 1997), prior discussion of displacement has been limited to the displacement of motives. Yet "All the Things You Are" includes some astonishing examples of phrase and subphrase displacement. To classify these and other techniques, I borrow Harald Krebs's notation for metrical dissonance, as presented in his book *Fantasy Pieces* (1999). Using an adaptation of his approach, I describe Evans' techniques in detail. This description opens avenues for further research on metrical dissonance in jazz.

Ordered Step Motives in Jazz Composition
Keith Salley, Shenandoah Conservatory

When analyzing jazz compositions that are either harmonically capricious or tonally ambiguous, the task of determining points of arrival and departure and tracing the linear patterns that connect them can become difficult. This study investigates the extents to which such capricious or ambiguous aspects of jazz compositions are melodically driven. While I do not wish to invoke intentionality, I do wish to explore how melodies make sense of some unusual turns of harmony, tonality, and even form.

The focus of this study is the melodic motive. It uses a tool called the Ordered Step Motive (OSM) to investigate the way linear motives give shape to jazz compositions that have frequently changing tonal centers, nonfunctional chord connections, no clear global tonics, or structurally open, circular forms. This study features analyses of Dave Brubeck's "It's a Raggy Waltz," and "In Your Own Sweet Way," Dizzie Gillespie's "Con Alma," Benny Golson's "Stablemates," Horace Silver's "Peace," and Wayne Shorter's "Nefertiti." This study invites further research into the relationship between common riffs and underlying structure in jazz composition, which may reveal crucial differences between standards written by Broadway and Tin-Pan-Alley composers and those written by practicing jazz musicians.

A "New" Lydian Theory for Frank Zappa's Diatonic Music
Brett Clement, University of Cincinnati College-Conservatory of Music

Though much of Frank Zappa's music has been called "tonal" due to its fundamental diatonicism, reconciling this repertoire with familiar theories of tonality is fraught with difficulties. In this paper, I will argue that an understanding of Zappa's diatonic music is best achieved in reference to the Lydian scale. The theory presented is loosely adapted from George Russell's influential jazz theory "The Lydian Chromatic Concept." It introduces the concept of a *Lydian system*, containing a limited group of diatonic modes generated from a common Lydian scale. Within the system, the Lydian mode, due to its special static properties, functions as a "tonic" state, representative of major tonality.

The remaining modes of the Lydian system will be shown to interact with the Lydian tonic in various ways in Zappa's music. First, I shall define three texturally stratified "zones of musical activity" in these works—melodic, chordal, and pedal—and will demonstrate how these three zones play important roles in achieving modal articulation, while also remaining indebted to the Lydian tonic in their pitch structures. Second, I will examine Zappa's practice of *pedal substitution*, a process whereby the same diatonic melody is set, at various times in a piece, to different pedals of the Lydian system. Third, I will describe certain progressions that may occur within a Lydian system. The presentation will conclude with an analysis of the song "Andy," which will demonstrate the integration of several closely related Lydian systems across a complete work.

3:00–4:00 MODES AND TRANSFORMATIONS IN BRITISH MUSIC

Chair: Julian Hook

The Modal Organization of Vaughan Williams' Works
Ian Bates, Yale University

This paper investigates the large-scale modal organization of Vaughan Williams' works. It begins by classifying the various types of modal relationships found in his works and devises a standard vocabulary for discussing these relationships. It introduces the concept of the *modal trajectory*, a directed relationship between two or more modes that unfolds chronologically over a musical span. Modal trajectories are then divided into two broad categories: those in which the value of one *modal domain* (pc content, mode type, or centricity) remains fixed and those in which the values of all three domains are varied. These are dubbed *fixed-* and *variable-domain trajectories*, respectively. At the same time, it develops a method of graphically representing a work's modal organization for analytical purposes. A visual representation of domain relations among all the diatonic modes is devised, and this *Table of Modal Relations* is then used to relate modal trajectories to one another via shared *domain conflicts* to form *trajectory*

systems. Finally, the paper proposes interrelated trajectory systems as the standard model for modal organization in the composer's works and shows how a piece's trajectory structure typically relates to its formal structure.

Form and Transformation in the "Nocturne" from Britten's *Serenade for Tenor, Horn, and Strings*
Michael Baker, University of Kentucky

Of the many writings on the music of Benjamin Britten (1913–1976), most are concerned with his numerous operas, including *Peter Grimes*, *Billy Budd*, *Death in Venice*, and *The Turn of the Screw*. While discussion of Britten's music focuses heavily on the operas, comparatively little is written on the analysis and interpretation of the song cycles for voice and orchestra, which includes the *Serenade for Tenor, Horn and Strings*, one of Britten's most beloved and often performed works.

The "Nocturne" from Benjamin Britten's *Serenade for Tenor, Horn and Strings* presents a number of interesting melodic and motivic devices that can be effectively modeled by aspects of diatonic transformational theories. After reviewing a pair of important transformational operations, I will present an analysis of the "Nocturne" that draws upon both traditional and recent developments in transformational theory. I will then examine the dynamic relationship of these operations with important aspects of the text for this song, illustrating that the transformational path Britten traversed in this work echoes the overall meaning of Tennyson's poem.

4:15–5:15 BALKAN METERS

Chair: Ronald Rodman

Problems with Unequal Beats: A Discussion of Non-Isochronous Meter in
Balkan Brass Band Music
Daniel Goldberg, University of British Columbia

In non-isochronous meter, categorically different durations between successive beats coexist within each measure, allowing for a hierarchical metrical framework to accommodate the *aksak* ("irregular") rhythmic periods that occur in many non-Western contexts. One such context is the repertory of a type of brass band popular in the Balkan region of southeastern Europe, in which the accentual patterns of accompanimental ostinatos group repeating series of pulses into unequal units, such as the 2-2-2-3 grouping of a nine-pulse period. This presentation examines transcriptions of ostinatos from recordings of Balkan brass bands and their American "Balkanite" counterparts in order to explore how non-isochronous meter might be theorized in relation to traditional Western meter.

Three special theoretical problems of the repertory are addressed. First, the changing interonset intervals between beats in non-isochronous meter seemingly work against metrical stability, and characteristics of the accompanimental patterns like fast tempos and complete materialization of the pulse can be seen to counteract this problem. Second, comparison of non-isochronous metrical cycles with similar isochronous cycles illustrates a distinction between pulse- and beat-oriented approaches to defining and classifying non-isochronous meter. Finally, in the interpretation of an ostinato from a recording of the piece “Nasred sela,” a contradiction between the meter indicated by gestalt principles for the perception of accent and the meter that acculturated listeners hear suggests that cultural context can affect how we process auditory input to a greater extent than current generative metrical theory takes into account.

Four-beat Aksak Meter Beyond the Balkans
Aleksandra Vojcic, University of Michigan – Ann Arbor

This paper details the problems in reading and understanding compound meters from the top-down, rather than bottom-up. I examine composite meters as related to compound meters, but comprising non-*isochronous* beats—e.g., a four-beat “9/8” meter common to much folk music of the Balkans that also frequently appears in 20th-century scores in varied notation. Musical examples illustrate the relationship between customary folk idioms such as the Serbian popular-music adaptations by the brass band “Zlatne Uste” and the contemporary scores by Bartok and Crawford. The discussion of non-isochronous four-beat meter is extended to include composite aksak meter in Ligeti’s *Capriccio*, a <5/8, 5/8, 7/8, 8/8> sequence, and illustrates the importance of asymmetrical periodicity of composite meter in phrase structure analysis.

4:15–5:15 PERSPECTIVES ON COPLAND’S *QUIET CITY*

Chair: Nadine Hubbs (yet to confirm)

The Structure and Genesis of Copland’s *Quiet City*
Stanley V. Kleppinger, University of Nebraska – Lincoln

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

The piece’s outer sections hinge upon the same anhemitonic pentatonic collection. This collection is the source of significant pitch centers for the whole

composition—that is, the most-stressed pitch classes of each section together replicate the collection governing the music’s first and last measures. This principle, and the music’s exceptions to it (especially at the work’s climax), generates a remarkable correspondence to the internal struggles of Shaw’s protagonist, Gabriel Mellon.

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

A Tonal Revolution in Fifths and Semitones: Aaron Copland’s *Quiet City*
David Heetderks, University of Michigan – Ann Arbor

Tonal ambiguity in Aaron Copland’s music is a topic that recurs occasionally in critical commentary. This paper argues that this ambiguity is symptomatic of a radical reorganization of the constituent elements of tonality, and demonstrates this through an analysis of *Quiet City* (1940) that uses models of harmonic relation developed by Robert Morris, Stephen Brown, and Joseph Straus.

The pitch relations used in the work can be modeled through a *Tonnetz* that is generated by the intervals of a perfect fifth and semitone, and which has C as a privileged member. In the opening section, *pattern completion*, a voice-leading technique in which the missing note of a collection established as normative conspicuously sounds in order to complete the collection, articulates points of arrival. The pitch C, which is the axis of inversion of the opening collection, does not figure prominently in the bass part, but rather acts as the melodic center of the trumpet melody. The motion toward the climax, which makes a dramatic shift between two diatonic collections, shows a large-scale inversional relationship around the central pitch, C, mirroring the inversional symmetry around C in the original pentatonic collection.

This analysis shows how this work takes constituent elements of tonality, including diatonic and pentatonic collections, the concept of privileged register, and the model of the cadence, and transforms their inner relations. In *Our New Music* (1941) Copland avowed to the aesthetic goal of tapping new potential within the tonal system; *Quiet City* provides a striking example.

Saturday, May 16

9:00–10:30 IN SEARCH OF METER

Chair: Kyle Adams (yet to confirm)

Projective Meter in Gesualdo's Tenebrae Responsories
Timothy Chenette, Indiana University

While Carlo Gesualdo's music is often disjunct, his Tenebrae Responsories for Maundy Thursday are in a continuously polyphonic style. This paper will suggest an approach to continuity and structure in this piece as they are facilitated by rhythm and meter. It will focus on the contextual, cognitive process of listening using concepts of projection developed by Christopher Hasty, though it will also draw on more score-based and retrospective modes of hearing.

Seen from a projective standpoint, Gesualdo's Tenebrae Responsories for Maundy Thursday are remarkably similar in construction and show a high degree of continuity and clear dramatic structure. Almost all begin with a relatively extended section of polyphony that carefully establishes a pulse and, often, higher levels of meter. While each opening section does this in a unique way that has implications for the affect and dramatic structure of the piece, the processes by which it is done are similar in each case. This polyphonic section is then interrupted and enriched by various expressive metrical states. After a detailed examination of the opening polyphony of Responsories I and III from Gesualdo's Tenebrae Responsories for Maundy Thursday, this paper will analyze Responsory II more thoroughly. Finally, it will present an overview of Gesualdo's metric strategies as they relate to structure and continuity.

Parsing Time with Harmony
Sara J. Bakker, Indiana University

The unmeasured preludes of the French Baroque are notoriously enigmatic pieces. As guides to improvisation, these pieces use incomplete notation; they contain neither bar lines nor fixed durations, and instead use long and short note values to represent harmonic and melodic events respectively. Thus, many details of the musical surface are left up to the performer. Music with such inherent performative flexibility necessarily challenges our traditional modes of understanding time in Western art music— notions of rhythm, meter and hypermeter become impossible. There is no inherent periodicity, no upbeats and no downbeats.

Despite these complications, I assert that pitch content, the only fixed elements available in this repertoire, can obtain a more pertinent and useful description of time. Four clear phrases emerge in the prelude to Elisabeth-Claude Jacquet de la Guerre's Suite III in A Minor (1687). Each of these articulates the functions T, PD, D, and T differently and enables one of three perceptions of time.

We experience Focused Time when the harmonic goal as well as the motion toward it is direct. In Diffuse Time, however, we are confronted with both tonicizations and phrase expansions that obscure the relationship between the harmonies and phrase functions—the relationship is no longer one-to-one and onto. Finally, we experience Unending Time when no sustainable sense of harmonic goal is possible. My paper explores these different perceptions of time and suggests new listening strategies for a harmonically based temporality of tonal music.

Durational Idealism and Messiaen's *Livre d'orgue*
Anton Vishio, Steinhardt School, New York University

Difficulties in interpreting events in the “ametric” framework of some styles of twentieth-century music are well known, and in particular what we might term the problem of “durational idealism,” a phenomenon Joel Lester has described as the lack of “one-to-one relationship between notated symbol and perceived duration.” Messiaen's *Livre d'orgue* (1951–52), which is a kind of compendium of durational explorations, poses the problem *in extremis*.

Can we gain access to the experience of these time spans? Fortunately, the composer's particular temporal creativity—the very processes by which, as he put it to Almut Rößler, he “chop[s] up Time here and there, and can even put it together in the reverse order, a little as though he were going for a walk through different points of time”—suggests a way in. For instance, in the third movement, *Les Mains de l'Abîme*, Messiaen uses various transformations of tālas to allow proportional relationships and characteristic rhythmic patterns to emerge from their juxtaposition. A close reading of this and other examples will suggest how we might climb out of the abyss of durational complexity—and gain a heightened appreciation of those moments which remain beyond our temporal grasp.

10:45–12:15 ANALYSIS AND PERFORMANCE

Chair: Miguel Roig-Francoli (yet to confirm)

The Act of Interpreting J. S. Bach's Allemande for Solo Flute
Samantha Inman, University of Cincinnati College-Conservatory of Music

Analytical inquiry coupled with the study of past performances provides the performer with a wealth of information that can be used to guide the creation of a meaningful interpretation. Using the first movement of J. S. Bach's Partita for Solo Flute, BWV 1013 as a case study, this paper proposes and illustrates a five-step process to musical interpretation that balances both dramatic and analytic concerns. This method builds on earlier attempts to illuminate the potential for interaction between performance and analysis, particularly those of Janet Schmalfeldt (1985)

and Tim Howell (1992). My method differs from these by emphasizing the performer's active contribution to the interpretive process.

The five steps are 1) Initial Readings; 2) General Listening; 3) Analysis; 4) Focused Listening; and 5) Formation of Interpretation. Possession of the knowledge gleaned from this process does not restrict the performer from seeking new interpretations of a familiar work; insights gained from this process supplement rather than replace original ideas contributed by the performer. This combination frees the performer to choose from the widest possible range of options when making both planned and spontaneous performance decisions, fostering a truly creative expression of the work's essence.

On The Relationship Between Analysis and Performance in Atonal Music
Timothy C. Best, Indiana University

In the forty-five years since composer Arthur Berger called for a “new branch of music theory” to address the language of post-tonal repertoires, the proliferation of analytical tools for examining the structure of such works has been considerable. There remains, however, a considerable gap between the analytical results provided by such tools and their relevance to musical performance—a gap that I contend is far narrower in tonal analysis. In this paper, I propose that the comprehension of even the most basic atonal structures is largely unhelpful to a musician in developing an informed and meaningful performance. To fill this gap, I propose a multifaceted analytical approach grounded in the field of musical meaning, an approach that utilizes recent theories of musical gesture, embodiment, and intertextuality.

Defending his twelve-tone method in 1936, Arnold Schoenberg wrote that he instructed his students to, “... use the same kind of form or expression, the same themes, melodies, sounds, rhythms, as you did before.” This paper takes Schoenberg's compositional advice as analytical imperative. Focusing on one of the most over-analyzed works of atonal music in the repertoire, the second movement of Webern's Piano Variations, op. 27, this discussion avoids any mention of row forms, inverted canons, pitch-class symmetries, or fixed-registral dyads. Rather, using Peter Stadlen's 1936 performance edition as a starting point, I suggest specific gestural and topical prototypes, establishing the movement's connection to the past through various recompositions. My aim is to demonstrate that the movement derives its meaning from the expressionistic distortion of these prototypes.

Conveying Proportion and Other Performance Issues in John Adams's *China Gates*
Kyle Fyr, Indiana University

In the study of the interactions between musical analysis and performance, minimalist and post-minimalist music have largely escaped scholarly attention. John Adams's *China Gates* (written in 1977 for solo piano) provides an interesting case study, however, of how closely analysis can intertwine with performance in such

music, especially with regard to proportion. *China Gates* features a constantly articulated eighth-note pulse stream at a steady tempo throughout the piece, and is formally proportional both at local and global levels. This paper asserts that proportion is not only a useful line of analytical inquiry for *China Gates*, but the conveyance of its inherent proportionality also directly affects many important performance decisions. In turn, I illustrate methods of pianistic attack, pedaling, and subtle dynamic contrast that help communicate the relationships between local paired sections while also conveying the larger proportional design in performance. I also explore the ways in which the performer may interpret the visual representation of the piece's "gating" that Adams provides on the inside cover of the score. Thirdly, I illustrate how proportional analysis can guide the performer in the interpretation of Adams's score indications. Finally, I discuss the perceptibility of proportion in musical form and its usefulness as an analytic construct by relating my work to the work of Jonathan Kramer.

2:00–4:00 HISTORIES AND DISCOURSES OF THEORY

Chair: Thomas Christensen

Heinrich Christoph Koch's Description of the Andante in Joseph Haydn's Symphony
No. 42 as a Response to Recent Sonata Theories
Gregory Hellenbrand, St. Paul, MN

In *Elements of Sonata Theory*, Hepokoski and Darcy propose the concepts of the medial caesura, two-part exposition, and continuous exposition to describe certain works of Joseph Haydn and other eighteenth-century composers. However, this approach does not sufficiently reflect the musical thinking of eighteenth-century theorists. For example, the notion that an exposition can be classified as either two-part or continuous, depending on the location of a medial caesura, is not compatible with Koch's concept of the first main period. Hepokoski and Darcy overlook the vital role of the "subsidiary period" or "clarifying period," as a type of "appendix" (*Anhang*), which Koch describes as a further "explanation" after a closing phrase.

The main period of Joseph Haydn's Andante consists of six four-measure phrases, repeated and varied, followed by an expansive closing phrase. In addition to a new cantabile passage, too short to be considered a complete phrase, unequal segments make up two clarifying periods as appendices. The application of sonata-theory principles to this complex of phrases is problematic. If Haydn's exposition were considered as "two-part," the "medial caesura" (V/V) would not function as expected, since it is followed by a closing phrase with already-familiar melodic content, not a contrasting second theme. Neither can Haydn's exposition be fruitfully construed as "continuous" because of the early arrival of a closing phrase with two extensive subsidiary periods. By contrast, Koch's analysis provides a more precise formulation based primarily on harmonically defined phrases rather than

themes.

Reflective Equilibrium and David Lewin's Analytical Methodologies
Peter Shultz, University of Chicago

David Lewin's famous essay on Stockhausen's *Klavierstück III* presents not only an analysis of the piece, but also the process by which Lewin constructs that analysis. Beginning with some intuitive observations about the piece, he proposes an analytical system. Then over the course of the essay he progressively refines both the system and his intuitive judgments, in order to bring them into mutual harmony.

In this paper, I argue that this process is a distinctly Lewinian methodology akin to “reflective equilibrium” (RE), a process of moral reasoning first described by Nelson Goodman and popularized by John Rawls. RE involves a similar progressive harmonization of “considered judgments” and systematic beliefs; what Lewin calls “intuitions” take the place of Rawls's “considered judgments.” I propose that intuition colors each step of his analytical process, and that the resulting analyses are satisfactory (to Lewin) not merely because of their self-consistency, but also because of their accordance with intuitive, pre-theoretical judgments.

The most profound symptom of RE in Lewin's thought is his rejection of both natural law (à la Rameau or Schenker) and mere consistency as justifications for theories about music. Selections from his writings show that although he regards consistency as insufficient, he puts a high value on the /search/ for consistency; and throughout his own analyses it remains his only epistemological appeal.

The Universalism of Marin Mersenne's *Harmonie universelle*
John Reef, Indiana University

The fourth treatise of Marin Mersenne's *Harmonie universelle* (1636) contains two curious examples in a proposition on the diatonic genus: one is of a Canadian dance song; the other is of songs of the Brazilian Tupinamba Indians. In citing these examples, Mersenne takes a stance on a question that occupied French thinkers in the decades preceding his publication: whether certain universal moral and aesthetic values underwrite human experience, or whether the moral and aesthetic practices of a culture are products of custom alone. Mersenne's intent is to prove that the diatonic genus is more natural than the chromatic and enharmonic genera—that someone brought up in a “primitive” culture, unschooled in European music, would naturally sing in the diatonic genus. If the diatonic genus's natural origin were true, then the genus could be regarded as an element of humankind's universal musicality. Nevertheless, Mersenne cannot escape counterclaims that musical preferences are diverse, and do not reflect any universal standard. This antagonism between universalism and diversity informs Mersenne's dialectical prose throughout *Harmonie universelle*.

In this paper, I contextualize Mersenne's negotiation of universalism and

diversity within his intellectual climate, and within the fascination for the exotic and primitive that pervaded contemporary thought; specifically, I adduce Montaigne's essay, "On Custom" as a foil to Mersenne's universalizing discourse. In addition, I compare another sort of universalism that pervades Mersenne's writing, one determined not in nature, but through the contemplation of heavenly perfection. This understanding is the basis of Mersenne's discourse on the unison.

Sympathetic Resonance: György Ligeti's "Cordes à vide" and the Discourses of
Theory
August Sheehy, University of Wisconsin – Madison

If György Ligeti's music is difficult to classify, his late works are especially so, at least in part because of conspicuous "backward-looking" structuring devices such as intervals and triadic sonorities. In the case of triads, Eric Drott has convincingly argued that their use in works such as the *Horn Trio* and *Études pour piano* represent a compositional counterargument to assertions made by Adorno and Boulez that these sounds are too historically burdened to be useful in modern music. Rather than interpreting Ligeti's late music as a general response to particular modernist arguments, I ask what specific role such "restorative gestures" might play in one work, *Étude pour piano, No. 2, "Cordes à vide."*

I find that "Cordes à vide" responds to—indeed resonates with—a panoply of discourses distributed across the history of Western theory. What appears at first to be a compositional study on the potential of perfect fifths turns out to be something rather different: a demonstration of the phenomenological incommensurability among different theoretical concepts often supposed to name the "same thing," e.g., perfect fifth, [07], or 2:3. "Cordes à vide" can thus be read as a sonorous critique of a systematizing impulse threaded through the history of music theory. More broadly, this paper gestures towards a methodology that reconciles formal analysis with historiographic concerns in late twentieth-century music by suggesting that, rather fixing the meaning of a work through analysis, the music be allowed to resonate pluralistically with discourses in processes of mutual critique.