The modern language of contemporary composers often resists attempts to assign narrative. However, by parsing the structure of contemporary works, it is possible to uncover hidden narratives. This paper develops a way to uncover meaning in modern choral music by examining the meaning engendered by the movement of contrapuntal lines in Sven-David Sandström’s *Agnus Dei*, a dense, eight-voice work for *a capella* choir that employs György Ligeti’s technique of micropolyphony. Over the course of this work, the relationship between the vocal lines changes from an inversional contrapuntal relationship to similar contrapuntal relationship and back again.

This paper proposes that these changing relationships create a musical narrative that corresponds with and expands beyond the narrative implied by the Agnus Dei text. The narratives of the music and text will be fused with Lawrence Zbikowski’s Conceptual Integration Networks to render a combined meaning of the piece. In addition, the result will be shown to allude to a biblical text. By demonstrating the ability of modern choral music to generate meaning, this paper further promotes the investigation of narrative in late twentieth-century vocal music and the discovery of gestures in modern vocal music that can be applied in the pursuit of meaning in modern instrumental music.

**Order and Chaos in Stravinsky’s Concertino (1920) for String Quartet**

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The Pennsylvania State University

Interestingly, *Concertino* has a coherent structure that is easily explained with terms, such as Edward Cone’s “three phases of stratification, interlock and synthesis” and Jonathan Cross’s “sound blocks” that apply appropriately to Stravinsky’s *Symphonies of Wind Instruments* and to some passages in *Pulcinella*—both of these completed in 1920, the same year as *Concertino*, but without the strident outcome that audiences experienced upon hearing *Concertino*. The concept of “interlocking momentum” is also suitable for describing *Concertino* because of the way in which Stravinsky established perpetual motion through the interlocking of his musical ideas for this work.

For this relatively short String Quartet of 215 measures in one movement, the musical sketches for *Concertino* are often unbarred and show how Stravinsky experimented with the creation of repetitive melodic figures in multiple voices until his thoughts crystallized. The momentum that Stravinsky created in *Concertino* is not unlike the driving force of the first movement of *Three Pieces for String Quartet* but the outcome of *Concertino* is more complex. By comparison with *Three Pieces*, the texture that Stravinsky created in *Concertino* is generated by many more layers of activity and the use
of contrasting material. Stravinsky’s meticulous sketching for *Concertino* shows how he deployed these repetitive figures that result in sound blocks and how he established “interlocking momentum” through the superimposition, interruption and juxtaposition of motifs within these blocks and among them as well.

**György Ligeti’s Continuum: A Case Study in Positive and Negative Space Analysis**
Patricia Burt
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An analysis of the relationship of negative to positive space provides a precise understanding of a work’s motion through and placement in frequency-space. This paper demonstrates the structural significance of negative space to the design of a musical composition and illustrates the kinds of information a negative space analysis reveals using György Ligeti’s *Continuum* as a case study. *Continuum*, composed in 1968, is a sound-mass composition written for two-manual harpsichord. The form of the piece is created by a gradual evolution of sound clusters and a shifting of their placement within a frequency field defined by the upper and lower boundaries of the composition’s range. To analyze the relationship of negative to positive space, a pitch graph of the composition is created where pitch is plotted against time. This graph forms a picture of the pitch-shape of the composition. The highest and lowest pitches of the entire composition form the framework within which the whole piece is enclosed, defining the outer “edges” of the negative space. For each unit of time, four values are then calculated from the pitch-graph: the number of pitches sounded, the number of unsounded pitches lying above the upper boundary of the sound, the number of unsounded pitches lying below the lower boundary, and the unsounded pitches which lie within the boundaries of the sound. When these four values are plotted as a line graph, an elegant picture of a set of spatial relationships emerges revealing many of the structurally important moments in the piece.

**HARMONY AND FORM**

**Analysis of Bulgarian Choral Obrabotki**
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The music of Bulgaria is an excellent example of a complex musical tradition which combines Middle Eastern *makams* (modes), regional microtonal structures, pentatonic scales, diatonic modes, and major/minor collections. This paper explores the boundaries between two often compartmentalized fields, music theory and ethnomusicology, and analyzes the harmony in Bulgarian choral arrangements (*obrabotki*) created during the socialist period (1944-1989). The genre of choral obrabotki was established by the Bulgarian composer Filip Kutev in the early 1950s and became popular worldwide through the performances of the female choir at the Bulgarian National Radio “Le Mystère Des Voix Bulgares.” This paper traces the incorporation of harmony through three primary categories of choral obrabotki. The first category includes arrangements
with basic chordal language. The second category groups examples from the “golden period” of choral obrabotki (1970s-1980s) when composers experimented with different techniques of enriching the standard vocabulary through mode mixture, tonicizations, quintal-quartal harmony, and clusters. The third category includes pieces typifying the avant-garde approach to choral obrabotki and the genre’s period of “emancipation of dissonance.” I suggest that Roman numerals, pitch-class sets, and Schenkerian analyses are valid methods of examining the Bulgarian choral obrabotki if we alter some of our Western harmonic expectations to embrace modal and Middle Eastern influences in the Bulgarian musical language.

‘It’s Fun to Have Fun, But You Have to Know How’: Harmonic Adventures in Rachmaninov’s Piano Preludes
Timothy Shaw
Philadelphia Biblical University

The music of Rachmaninov has maintained a somewhat marginalized status in music scholarship. He is often rightly regarded as a harmonically conservative composer. Yet this study offers an interpretation of Rachmaninov’s use of highly chromatic progressions within his characteristically conservative harmonic framework. Further, this study addresses the formal placement of chromaticism and considers the functional significance of such harmonies. Selected preludes from Opp. 3 and 32 constitute the focus of this study. The analytical methodology employed is adapted from that of Richard Bass, Charles Smith, Kevin Swinden, and others.

Rachmaninov typically allows himself one harmonic adventure per piece, and these harmonically intriguing passages tend to happen in close proximity to structural cadences (either before or after). Wherever the chromaticism is located, Rachmaninov’s procedure remains the same—he expands Predominant function within the overriding function of the passage. Further, Rachmaninov often underscores these passages with a pedal tone, with the use of unique sonorities, and occasionally with the presentation of a unique pitch-class. Thus, Rachmaninov’s chromatic passages act as signifiers of a piece’s form. The functional significance that Rachmaninov attaches to chromatic harmonies within these passages helps to distinguish his music from that of his contemporaries. Indeed, part of Rachmaninov’s charm stems from his ability to infuse functionally static passages with harmonic motion.

The Incompetent Pianist:
Humor in the First Movement of Beethoven’s Piano Sonata Op. 31, No. 1
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Appalachian State University

Music scholars often comment on the similarities between the first movements of Beethoven’s piano sonata in G major, Op. 31/1, and the “Waldstein,” Op. 53: the first
phrases of both movements are transposed down a major second in their respective second phrases, and both use III and VI as secondary key areas. Despite these structural similarities, the two movements are in stark contrast to each other in their expressive qualities: while the first movement of the “Waldstein” portrays a serious and energetic mood, Op. 31/1 conveys a musical discourse that is both humorous and lighthearted. In this very first composition that introduces the use of chromatic mediants as secondary key areas, Beethoven concocts a musical plot that mimics an incompetent pianist’s inept improvisation of a sonata-form movement. From his desperate attempts to play with his two hands together to his accidental stumbling upon the “wrong” secondary key area, the movement is filled with incidents that are at odds with our expectations of a sonata-form movement. The humor associated with these stylistic oddities is created through rhythmic, dynamic, and gestural details. This paper will study the melodic, harmonic, and formal construction of the movement and how it defies the norm of classical style.

BRIDGING MUSICAL WORLDS

Bridging Musical Worlds:
Charles Wuorinen’s Percussion Symphony and Guillaume Dufay’s Vergine Bella
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William Paterson University

Charles Wuorinen has described the twelve-tone system as a “larger organism that embraces western tonal music too.” In his hands, this organism is capable of making profound connections between present-day works and those composed centuries ago. Wuorinen’s Percussion Symphony (1976) in particular stands as a masterful demonstration of this. Its dodecaphonic material integrates important elements from Guillaume Dufay’s canzona Vergine Bella (the text of the original setting is from Petrarch’s Canzoniere); Wuorinen both contrasts and links pre-tonal and post-tonal music.

Pitch material connecting the Wuorinen and the Dufay is involved in different levels of the composition’s structure; this material both shapes the large-scale structure of the Percussion Symphony and permeates the surface of the composition via several direct motivic connections. Wuorinen’s compositional method employs serialism in a manner which embraces tonal and pre-tonal inferences, devices and traits. Other musical parameters, such as instrumentation, rhythm and textual content create reminiscences of early church music within the Percussion Symphony. These elements combine to invoke and pay homage to Dufay, bringing together traditions from centuries past and innovations of the present.
Twentieth-Century Organum: Middleground Voice-leading in Britten's War Requiem
David Forrest
Texas Tech University

While many theorists have applied Schenker’s theory of prolongation to post-tonal music, such studies have met with fierce criticism. Much of the debate over post-tonal prolongation has focused on the non-triadic music of Schoenberg, Stravinsky, Berg, Webern, Bartók and others. Less has been said about triadic post-tonal music. Because triadic post-tonal music borrows techniques from both tonal and post-tonal traditions, it fits comfortably into neither category. Based on the current state of research, it is not entirely clear where triadic post-tonal music fits into the debate over prolongation.

Britten’s triadic post-tonal music present special challenges for prolongational analysis. On the one hand, Britten’s music often features a triadic surface organized around one central pitch. These aspects of this music make prolongational analysis tempting. On the other hand, Britten’s nonfunctional harmonic progressions combined with free alterations of diatonic and non-diatonic scalar material create tonal ambiguity.

While prolongational analysis is designed to reveal underlying counterpoint, with Britten, prolongational analysis reveals a frequent lack of middleground counterpoint. Rather than two independent parts, all parts are dependent on the structurally superior melody. Therefore, middleground graphs of Britten’s music often resemble monophony. This realization invites a comparison between Britten’s music and medieval organum. Felix Salzer’s discussion of twelfth-century organum offers a useful model for describing middleground structure in Britten's War Requiem. In this paper I analyze passages from the War Requiem that exemplify this organum model.

Echoes of Petrushka in Shostakovich’s Second Piano Trio
Daniel Zimmerman
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It is well known that Shostakovich frequently composed passages that deploy the conventions of Jewish folk music. In this paper, I focus on his Second Piano Trio in E minor, Op. 67, especially on the final movement, which contains the earliest examples of klezmer music in his œuvre. From the beginning, the Jewish themes of this movement have been interpreted as Shostakovich’s depiction of Jews in the Nazi death camps, news of which was first reported as Shostakovich composed the piece.

I adduce harmonic, formal, and motivic evidence to suggest that the Piano Trio also shows the unmistakable influence of Stravinsky’s Petrushka, a piece that Shostakovich probably knew entirely by heart. The story of the puppet with human longings, whose actions are severely restricted and controlled from above, can be viewed as Shostakovich’s metaphor for the lives of Jews.
If this is so, and if Shostakovich identified with oppressed Jews whose music he references in the Trio (Elizabeth Wilson, 1994), then the puppet’s story informs Shostakovich’s view of his own identity and historical position. Shostakovich was clearly not as imperiled as the Jews in Nazi concentration camps, but his artistic life was severely restricted by the threat of violence. Shostakovich enacted this restriction in a literal way as he composed the Trio by choosing formal procedures which severely restrict a composer’s freedom: the three-voice canon at the beginning of the entire piece and the third-movement Passacaglia.

**INTERDISCIPLINARY TOPICS**

*Il Cembalo de’colori, e la Musica degli occhi: Newtonian Optics and Modal Polarity in Early-Eighteenth-Century Music*

Bella Brover-Lubovsky

Hebrew University / Jerusalem Academy of Music and Dance

The pairing of the parallel major and minor keys (modal mixture) is acknowledged as a fundamental resource of the mature harmonic tonality that acquired primary syntactic role and formal importance only in the late-eighteenth century. I aim to disprove this view by showing:

1) that it has been extensively employed by the North-Italian composers already at the turn of the century;

2) by viewing their use of modal polarity through the lens of contemporaneous scientific theories and artistic practices.

I analyze the rhetorical and grammatical aspects of binary oppositions and modal transportability in the music of the high Baroque Venetian composers (Vivaldi, Marcello, Albinoni, Caldara). Their innovatory treatment of modal mixture corresponds with the simultaneously emerging aesthetics and pictorial imagery of clouds and the new *chiaroscuro* techniques in Venetian art (Tiepolo, Ricci, Pittoni, Guardi). Concurrently, the leading North-Italian theorists (Calegari, Vallotti, Riccatti) widely discuss the issues of consanguinity and symbiosis of major and minor modes, highlighting the comprehension of their alliance.

These developments are further considered through the prism of their contemporaneous optical theories, as stimulated by Newton and advanced by his translators and exegetes in the Veneto (Conti, Rizzetti, Crivelli, Algarotti). They widely address Newton’s theories of reflected light and of the transparency and opacity of objects, explaining their pertinence and transporting their deductions and applications to various cultural phenomena.
My aim is to show how the exploration of modal mixture in music perceptively mirrors the all-embracing impact of new scientific theories on the intellectual climate of the Veneto.

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

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

In Debussy’s instrumental music, the Proustian narrative involves transformation of a recurring motive, leading to climax or apotheosis, often in the wrong key, followed by musical signifiers for loss. This paper traces this narrative through *Reflets dans l’eau*, and the first movement of the Cello Sonata. The paper concludes with a brief discussion of the end of temporality in the 20th century (after Frederic Jameson).

**On the Edge of Modernism:**  
*Anthroposophy, Expressionism, and Viktor Ullmann’s Der Sturz des Antichrist*  
Rachel Bergman  
George Mason University

Viktor Ullmann (1898-1944), a Jewish, Austro-Hungarian composer who was killed in the Holocaust, was an integral and internationally acclaimed member of Arnold Schoenberg’s modernist circle during the 1920s. However, by the end of the decade Ullmann became dissatisfied with the modernists’ radical break from tonality and began to search for a distinct and personal style. Embarking on what he referred to as the “odyssey” years (1929-1931), Ullmann struggled to find a meaningful and original mode of expression. Ultimately, he became captivated by the writings of Rudolf Steiner and anthroposophy, which profoundly reshaped his spiritual outlook, invigorated his creative process, and radically reformed his aesthetic sensibilities. Ullmann’s opera *Der Sturz des
Antichrist (The Downfall of the Antichrist), completed in 1935 and based on an anthroposophic text by Albert Steffen, is the first work, and largest to date, manifesting his new musical and aesthetic style. While the text is clearly inspired by anthroposophy, the formal structure, use of leitmotifs, and harmonic vocabulary reflect the influence of Berg’s Wozzeck. The goal of the present study is to determine the extent to which Ullmann’s new-found compositional inspiration can be attributed to the anthroposophic text, on the one hand, and to Wozzeck, on the other.

TWENTIETH-CENTURY THEORY AND ANALYSIS

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 cycle 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 that Britten traversed in this work echoes the overall meaning of Tennyson’s poem.

Interval Class Succession Graphs in Edison Denisov’s Sonata for Alto Saxophone

Zachary Cairns
Eastman School of Music

This paper celebrates the 80th anniversary of the birth of Soviet/Russian composer Edison Denisov (1929-1996) by examining the third movement of his Sonata for Alto Saxophone and Piano. In this movement, much of the pitch material is derived from two distinct twelve-tone rows, but a significant portion of the material is not based on any row at all. The main focus of this analysis is the relationship of the two rows to each other, and the relationship of the serial and non-serial music. To this end, I will introduce an analytical tool I call the interval class succession graph (ICSG).
An ICSG is a simple, graphic way to represent the ordered interval class content of a twelve-tone row. Each of the graph’s nodes represents a single interval class that occurs between adjacent pitch classes in the row, and these nodes are connected by arrows that show the successions of interval classes found in the row. An ICSG is intended to capture the full range of possible interval class successions in a twelve-tone row.

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

Conflicting Lines, Cohesive Structures: Multiple-Directed Linearity in Witold Lutoslawski’s Third Symphony
James Ogburn
University of Pittsburgh

Witold Lutoslawski is widely recognized (see Charles Bodman Rae and Steven Stucky) as having contributed numerous innovations to the twentieth-century canon of “Western” avant-garde music. His contributions include new approaches to notation and aleatoric technique (especially in ad libitum sections), formal structure (‘chain technique” and unusual four-movement forms), and pitch organization (interval pairing and non-serial twelve-tone approaches). While emblematic of many of these qualities, Lutoslawski’s Third Symphony also demonstrates an overlooked aspect of his late compositions—namely, multiple-directed linear processes. In my essay, I focus on these processes within several levels of musical structure (pitch, rhythm, orchestration, register, texture, and form), primarily applying set and contour theory as the basis for my argument.

By investigating multiple-directed processes within the work, I expand on the existing scholarship and place the previously acknowledged innovations—chord aggregates, pitch complementation, formal design—in a different context. Whereas more traditional modes of linear design fuse most layers to support and articulate the local and large-scale goals, in Lutoslawski’s Third Symphony many levels of the structure arrive at their goal in distinct places. Although, as Jonathan Kramer’s The Time of Music demonstrates, multiple-directed linearity is not exclusive to Lutoslawski’s music, it is a facet that has been overlooked or mentioned only in passing within Lutoslawski studies. In addition, Lutoslawski’s application of linear processes at different levels of the structure provides interesting ramifications to the large-scale form not found in other works.
MELODIC FOUNDATIONS

Ordered Step Motives in Jazz Composition
Keith Salley
Shenandoah University

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 contributes to the written body of theoretical knowledge about jazz composition by engaging with current scholarship on tonal ambiguity, circular form, and motivic associations between melody and harmonic organization. This study features analyses of Dave Brubeck’s “It’s a Raggy Waltz,” and “In Your Own Sweet Way,” Dizzy 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.

Finding Slonimsky in John Adams’s Recent Instrumental Works
Alexander Sanchez-Behar
Ashland University

John Adams’s recent instrumental works employ melodic materials derived from Nicolas Slonimsky’s *Thesaurus of Scales and Melodic Patterns* (1947), an influential source for musical composition that Adams has used since the early 1990s. Yet Adams has not specified the nature or desire of this influence; thus, little is understood about the way in which he uses these scales and melodic patterns. Given the recency of his compositions, scholars have not yet traced Adams’s patterns back to the *Thesaurus*, which raises a number of basic questions: how does Adams incorporate Slonimsky’s patterns in his works, and how do the chosen patterns relate to one another and interact within a musical piece?

In order to understand the properties of these musical scales and melodic patterns, and as a precursor to the discussion of Adams’s use of them, my paper will first explore
Slonimsky’s *Thesaurus* in depth. The second portion of my talk will consider various ways in which Adams borrows these patterns from the *Thesaurus*: (1) replicating them in their entirety, (2) gradually altering them through different types of pitch modifications, and (3) creating unique patterns that nevertheless resemble those from Slonimsky’s *Thesaurus*. This study will reveal that Adams not only incorporates but also transforms Slonimsky’s patterns into his unique musical style.