

### **The Effectiveness of the *Urlinie* in First-Semester Melodic-Dictation Drills Through Melodic Fluency**

Alexander Amato (Stephen F. Austin State University)

Among exercises in Aural-Skills courses, it is the melodic dictation that often poses the most challenges for the students, especially in the first semester. The pitches of a melody can sound as random scalar notes to the undergraduate. To remedy this, I propose the application of a classroom-tested procedure of improving student accuracy on melodic dictations through an approach that employs Schenker's concept of the fundamental line through the application of melodic fluency during the first-semester Aural-Skills course.

It may seem that Schenkerian concepts are too complex to first-semester Aural-Skills students, but my procedure has proven otherwise. Schenker (1979) and Felix Salzer (1952) introduce the fundamental line as part of the basic melodic elements and recent pedagogical studies including Rogers (2004) have followed suit, but without using Schenkerian terminology.

My pedagogical procedure begins with scalar study and graduates to full-length melodies while phasing in melodic fluency, using conventional terminology. Once the students learn to identify pitches by scalar context, they hear arrhythmic pitch patterns. After the students learn that melodic progressions do not necessarily occur between adjacent notes, I dictate longer patterns, followed by melodies based on the patterns. The melodies then become longer with more leaps that draw out the underlying descent.

Since implementing this procedure in my first-semester Aural-Skills course, I have observed significant improvements in student performance on melodic dictations. More students have correctly transcribed melodies and the incorrect answers still show some evidence of awareness of the *Urlinie* and the relationship between it and surface pitches.

### **Machine Learning Models of Isolated Pitch Sets**

Lewis Jeter (Florida State University)

Though many theoretical measures of similarity rely on shared interval-class content, Kuusi found that in experimental conditions, similarity judgements were guided by a pitch set's degree of consonance, association with familiar sonorities, chord span, and the distribution of notes in pitch space. Perhaps this can explain why researchers have failed to reliably find significant correlations between theoretical similarity and empirical data. I propose instead that pitch sets modeled in less abstracted spaces that retain those features determined by Kuusi, such as Callander, Quinn and Tymoczko's OPTIC spaces, could yield reliable results and allow for a model of pitch set families based on empirical data.

Machine learning techniques such as linear regression can be used to create models that describe the relationship between a pitch set's attributes and perceptual judgments collected experimentally. Once the regression model is trained to experimental data, the model can also be used to predict values for pitch sets that were not tested experimentally and thereby be useful for confirming the theory that informed the model's construction. These models are of interest since it allows us to determine the relative importance of each pitch set attribute in relation to the average listener judgement and for their capability of predicting values for untested pitch sets.

I performed an experiment, gathering listener ratings of isolated pitch sets along five descriptive dimensions: smooth-rough, stable-volatile, clear-blurred, light-gloomy, and calm-irritable. Regression models were trained to fit values for the attributes identified by Kuusi to the average judgements of listeners. Each model determines coefficients that are interpreted as the relative contribution of a given feature. Figure 1 provides the coefficients for the regression models. Take stability judgments as an example where negative numbers indicate a contribution to stability, positive to volatility. As you can see, a pitch set's degree of consonance, intervallic correlation to the diatonic collection, and correlation to the whole tone collection contribute to a perceived sense of stability, with correlation to the diatonic collection being nearly three times as influential than a pitch set's consonance. Each of the verbal descriptions collected in the experiment is modeled in a similar fashion. It was not clear going into the experiment what listeners would attend to when being asked to evaluate a pitch set according to "volatility" but the regression models allow us to get a better sense of those structural elements that are influential, on average.

### **Expressive Timing and its Histories**

Daniel Shanahan (Louisiana State University) and Stephen Ai (Williams College)

In his 2009 essay, “Changing the Musical Object: Approaches to Performance Analysis”, Nicholas Cook argues for a “disciplinary refocusing” from the analysis of information contained within the score to that of information contained in performances. This refocusing has led to a number of large-scale studies of performance trends over time, often with fascinating results. Studies have shown that tempi tend to slow over the course of the twentieth century (see Leech-Wilkinson, 2009), that performances become significantly less flexible over time, and that performances are increasingly similar to one another, with less variance between performers.

This study re-examines these conjectures, analyzing more than 300 recordings of seven of Debussy’s *Préludes*. Specifically, it examines the notion that there is—to borrow a term from Meyer (1989)—a rapid, external stylistic change in performance in the mid-twentieth century. Musicologists have argued that World War II precipitated changes in performance practice, either because of a move away from an interactive (“read/write”) approach to one that reifies the musical object (“read only”, see Cook, 2014). In comparing aspects of tempo, rhythmic flexibility and the correlation between performances, this study also examines the methodological problems inherent in studying historical recordings from an empirical point of view. There are limits in the number of historical recordings available, and conjectures regarding pre-war performances are often based upon a very limited sample size.

Finally, this paper examines how the expression of functionally ambiguous points in several of Debussy’s *Préludes* has changed over the course of the century. Much of the literature on expressive timing has argued that performers tend to lengthen phrases at the arrival of a tonic (see Desain and Honing, 1994). In phrases in which the motion to—or away from—a tonic is ambiguous (such as mm.5 and 6 of “Des pas sur la neige”) the tempo arc of the phrase can be seen as an expression of function. Interestingly, it seems that this expression of function in functionally ambiguous progressions also changes over time. In studying the historical changes in tempo, aspects of flexibility, relationships to performances, and the expression of function can be addressed, and through the analysis of these features in performances of Debussy’s music, this study addresses many of these previously-held conjectures, while also discussing the pitfalls of such empirical and corpus-based approaches.

### **A Corpus Analysis of Harmony in Country Music**

Trevor deClercq (Middle Tennessee State University)

In recent decades, much has been published on harmony in pop/rock music, especially as compared to common-practice European art music, but what of harmony in other popular music styles? Country music, for example, accounts for 10% of listenership in the United States, yet no large-scale systematic study of its harmonic syntax has been published to date. To address this, I present in this paper a corpus study of harmony in 200 country songs. Overall, this corpus shows evidence that the harmonic language of country music stands somewhere between the more traditional language of common-practice music and the more contemporary language of pop/rock. For example, while common-practice music shows an overwhelming preference for “progressive” root motion—i.e., ascending 4ths, descending 3rds, and ascending 2nds—and pop/rock shows a close balance between ascending and descending versions of root-motion intervals, country music shows a clear preference for progressive root motion yet also includes a good deal of “retrogressive” motion. Other statistical analyses shed further light on harmony in country music, such as the most common chord extensions and the most common non-root position chords. From this additional data, I posit a sort of “Rule of the Octave” for country music. Ultimately, I argue that the blend between traditional and contemporary harmonic syntaxes found in country music possibly derives from similar back-and-forth trajectories in country music’s history and may reflect the underlying tension between conservative and liberal leanings in the cultural, political, and social outlooks of country music’s listener base.

### **Digital Sampling, Signifyin’, and Style in the Music of DJ Screw**

John Mattessich (Indiana University)

Ascription of stylistic influence often takes on the form of a language. The intertextual nature of this ascribed influence requires either an explicit or an implicit referentiality between artists. In his essay “What is an Author?” Michel Foucault identifies a type of author function that he deems as a “founder of discursivity.” As a founder of discursivity, the author function (a socially constructed ascription of meaning to a group of works) produces not just its own texts, but “the possibilities and the rules for the formation of other texts.” In southern hip hop, specifically the Houston area, DJ Screw serves as a common referent. Homage to artists who are viewed as possessing cultural capital in their field serves the referring artist twofold: it establishes their credibility as an artist who, in referencing a body of work contextualizes their own body of work; and it serves as an index of authenticity as their comparison to past cultural figures emphasizes their artistic proximity. Using Henry Louis Gates Jr.’s notion of “Signifyin(g)” to examine

stylistic references to DJ Screw in the work of later artists reveals his role as locus of reverential authenticity and a prism of referential style in southern hip hop; sounds and production techniques that are attributed his body of work are viewed by successors as established

stylistic parameters that serve as signifiers of the “real.” Additionally, the discursive musical process of DJ Screw can be read as the stylistic continuation of a long literary tradition within African-diasporic art.

### **“Where Do We Go Now?”: Harmonic Departure and Return in the Guitar Solos of Guns N’ Roses**

Zachary Cairns (University of Missouri-St. Louis)

The guitar solo is a ubiquitous feature of 1980s/90s-era hard rock. Slash, the original lead guitarist for Guns N’ Roses, is known for his melodic, bluesy, and often virtuosic solos. The majority of Slash’s solos utilize some degree of what I call harmonic departure. Harmonic departure refers to the highlighting of a new harmonic area during the solo. This may be a modulation to a key that has not yet been explored in the song, or a move to a new chord (usually in a strong hypermetric position) that has not yet been used. Typically, departure engenders a return to the original riff or tonality at the end of the solo.

This presentation will first examine all of Guns N’ Roses’ music from 1987 until Slash’s departure in 1996 in order to categorize their general approaches to harmonic departure and return. I will focus on the timing of the departure, the departure’s harmonic goal, and the method of return to the original tonality. After this, I will examine two cases from Appetite for Destruction that feature unusual return strategies: “Paradise City,” where the solo departs to the key of ii and then utilizes a post-solo bridge to delay the return to the original riff; and “Sweet Child O’ Mine,” where the solo again departs to the key of ii, but does not return to the original tonality at all. Instead, a new formal section begins, and the song ends in ii, over the repeated lyric “Where do we go now?”

### **Root Interval Schemas in Rock Music**

Jacob Gran (Louisiana State University) and David John Baker (Louisiana State University)

Rock music differs in its functional harmonic behaviors from more well-studied repertoires, such as the music of the common practice. Before it is possible to conduct harmonic analyses of the rock repertoire, one must arrive at an understanding of those harmonic expectations that are unique to rock music. There have been several recent attempts along these lines, but the literature is conflicted on its basic approaches to the problem (Stephenson, 2002; Nobile, 2016; Acevedo, 2017).

In this paper, we put forward a model of rock music schemas that synthesizes and streamlines past approaches. Rather than deriving harmonic exceptions from a chord’s placement within the scale, we propose instead that listeners derive their harmonic expectations from root motion schemas. We extracted these root-motion schemas through a corpus analysis of both the Temperley/de Clercq Rock corpus and the McGill Billboard corpus. Analysis based on our approach provides empirical evidence for claims made by prior scholars. In addition, we are confident that our model captures the essential differences between rock music and that of the common practice. The model of harmonic expectations generated by our theory provides a simple framework for harmonic analysis of rock music in future research.

### **Illumination of a Musical Ideogram in Dallapiccola’s “Fregi”**

Joe Argentino (Memorial University of Newfoundland)

Luigi Dallapiccola’s *Quaderno Musicale di Annalibera* (herein *Quaderno*) contains eleven short piano pieces—all based on the same row class—that alternate between strict contrapuntal writing and freer contrapuntal techniques. Many scholars have analyzed movements from *Quaderno* focusing on topics such as ‘Weberian’ influences or motivic unification—generally involving the prevalence of Bach’s signature motif. Lacking from this literature are any in-depth explorations of the central piece of *Quaderno* titled “Fregi” (“Friezes”), which is a magnificent example of what I will term a “musical ideogram.” Unlike the more famous examples of ideograms within Dallapiccola’s oeuvre, such as the fivefold appearance of the crucifix—drawn out with notes in the score—at the dramatic core of *Cinque canti*, “Fregi” is one of Dallapiccola’s richest examples of musical text-painting, where the actualization of the score depicts and forms an aural frieze rather than an actual image.

I will explore “Fregi” commencing with a straightforward analysis of the movement—utilizing common-practice set-theoretical tools—prior to venturing into uncharted territory where I will provide two idiosyncratic analytical depictions of “Fregi.” First, I will embark on a static (i.e., not in real-time) partitioning exploration of the

work using symbols in order to highlight invariant groupings; second, during a performance of “Fregi,” I will provide a real-time representation of the score through symbols—capturing the ongoing transformations between the six row series—which will ultimately form a second ideogram of “Fregi” in the form of a frieze.

### **Ferneyhough’s “Fragment”: Silence in the Second String Quartet (1980)**

Anna Rose Nelson (University of Michigan)

Brian Ferneyhough’s music and theoretical writings in the early 1980s were occupied with working out the significance of one term: the “figure.” For Ferneyhough, the figure (or later in his writings, “figural aspect”) was an energetic musical object or parameter—such as pitch contour, timbre, or dynamic—of the static “gesture” able to escape the solid gestural context and move through the rest of the piece, transforming and creating.

Since the ‘80s, the term has garnered significant academic attention. Lois Fitch’s dissertation on Ferneyhough’s figure (2004) argues that the figure is that musical object which is “composed out” and “spill[s] beyond gestural boundaries,” and Alessandro Melchiorre’s earlier work (1984) asserts that the figure is opposed to the static, “dead” gesture in that, in its dynamicism, it implies a “future” for the work. In this paper, I argue that these scholars, though quite correct in their definitions, ignore or even deny the possibility that silence can be understood figurally.

Indeed, the current definition of Ferneyhough’s figure must be amended if one is to understand the figural musical language in his Second String Quartet (1980). The first part of this paper will be an exercise in understanding the “figure” through Ferneyhough’s own writings and secondary material on the subject. The second will consist of an analysis of the string quartet, which serves as a case study for a broader understanding of the figure, by tracing the interaction between two “figural aspects”: a particular pair of gesture-framing sonorities, and silence.

### **Formal Function in Electroacoustic Music: A Spectromorphological Approach**

Andrew Selle (Florida State University)

This paper explores the relationship between the phenomenological experience of hearing a piece of electroacoustic music and the apprehension of formal and syntactical units present within it. This is an especially difficult task given both the unfamiliarity of many listeners with the aesthetics of electronic art music as well as the lack of an appreciable musical score for many works in this genre. I use Denis Smalley’s theory of Spectromorphology (a way to describe the sonic qualities of a given sound object and the way that is transformed over time) to show one way that formal function can be understood in electroacoustic music.

Segments from three different works are analyzed. First, I examine the use of musical texture and textural motion in John Chowning’s 1977 work *Stria*. Second, I look at Natasha Barrett’s *Mobilis in Mobili* (2006) and show how source bonding (the tendency to group sounds according to a perceived shared source sound) underlies the transitional functions within the work. Finally, I demonstrate Toru Takemitsu’s use of space and spatiomorphology to create a sense of completion in *Vocalism Ai* (1969). Each of these works has unique formal functions that are brought to light by examining them through a spectromorphological lens.

Ultimately, I show that while formal function in experimental electronic music is not as readily apprehended as it might be in common practice tonal music, spectromorphological concepts provide one useful approach to describing the roles that sound objects play in the syntactical structure of a piece.

### **Changing the Understanding of Robert Schumann’s Psyche: A Reintroduction to Florestan and Eusebius**

Andrew Perkins (University of Kentucky)

Florestan and Eusebius, the two imaginary characters created by nineteenth-century master, Robert Schumann (1810-1856), first appeared in the composer’s own critical writings and later as musical representations in *Carnaval* Op. 9 (1834) and *Dauidsbundlertanze* Op. 6 (1836). In his own diaries, Schumann has noted some of the personality traits shared by he and his two creations. One of Schumann’s biographers, psychiatrist Peter F. Ostwald, suggests that these two characters may indeed be representations of two aspects of the composer himself. But were these two characters the product of a mentally disturbed Robert Schumann, the fictitious musings of a genius, or somewhere in between? In this presentation, I attempt to define and explore the personality traits of Florestan and Eusebius based off of their original musical appearances in *Carnaval*. To aid in the process, I will employ the use of Conceptual Integration Networks (Fauconnier and Turner, 1998) to draw connections between musical phenomena and human characteristics so as to assign personality traits to each character and discuss the connections between

Schumann and his characters. Furthermore, I will discuss evidence cited by Ostwald in his biography of Schumann that calls for a thought-provoking reexamination of the belief that the composer indeed possessed a number of psychological disorders, opening the door for further research on Schumann's actual existence, as opposed to a misunderstood perception.

**“As If with Lightning Bolts”: The *Ombra* and *Tempesta* in Schoenberg’s *Das Buch der hängenden Gärten***  
Jessica Narum (Baldwin Wallace University, Conservatory of Music)

Arnold Schoenberg’s 1908-09 song cycle *Das Buch der hängenden Gärten* sets fifteen texts by the poet Stefan George. These songs, in conjunction with Schoenberg’s Second String Quartet and the Opus 11 Piano Pieces, are Schoenberg’s first compositions that abandon a tonal center. Most previous analyses of this cycle rely on pitch-class set-class theory to highlight structural relationships within and between songs. This structural approach, however, may overlook the expressive aspects of Schoenberg’s song cycle.

In this paper, I examine *Das Buch der hängenden Gärten* through the lens of musical topics and motivic interaction. My analysis examines how Schoenberg employs elements of two primary topics, the *ombra* and the *tempesta*, to shape our understanding of George’s texts. As discussed by Clive McClelland, both topics originated in seventeenth-century opera. The *ombra* is marked by low registers, slow or restrained rhythmic features, sudden harmonic changes, and unexpected chromaticism; it often signifies awe or dread. The *tempesta*, on the other hand, features a higher level of activity, including scalar passages or repeated accompanimental patterns; this may be used to signify agitation, fear, or emotional distress. Schoenberg employs textures and figures throughout *Das Buch der hängenden Gärten* that evoke both of these topics, influencing how listeners hear and interpret these songs.

As I will demonstrate, topical analysis has the ability to uncover expressive interconnections within and between songs; in addition, by focusing on the *ombra* and the *tempesta*, this paper seeks to understand how two older topics transform and persist into the twentieth century.

**The Vader System, or, the Evil in the Imperial March**  
Miklós Veszprémi (Yale University)

Darth Vader’s Imperial March from *Star Wars* feels as evil as the images it accompanies. The quest for what precisely makes it sound so evil has made it the single most analysed extract from John Williams’ soundtrack to the film series. Most explanations focus on the Gmin-Ebmin progression that lies at its heart. Bribitzer-Stull, Murphy and Richards suggest that it is evil because of the progressions’ consistent association with the dangerous, sinister, eerie and distant ever since Wagner used it in his Tarnhelm motif. Rossi, Buhler, Richards and Lehman interpret it as a distorted tonic-dominant relation, much in the same way as Darth Vader is the distorted, originally good Anakin Skywalker. This interpretation, whilst hermeneutically attractive, invariably leads to many complications, which Belval, by contrast, tries to resolve by hearing the music along the hexatonic and octatonic axes.

Instead of attempting to fit the progression into external systems such as tonality, I ask what system the music describes itself when mapped on the Tonnetz. The result is the Vader System: Every single harmony the Imperial March touches lies equidistant from or is balanced with countermoves against both triads of the notorious progression. The power of the dark side is shown to influence the music’s basic organization in a striking way: the progression’s triads function as magnets that warp the entire harmonic field towards itself. I show that the composer taps into vastly deeper levels of the compositional process to evoke the evil than previous authors have suggested.

**A Minor Diversion: Post-Medial Caesura Insertions in Early Classical Sonata Forms**  
Rebecca Long (University of Massachusetts, Amherst)

This paper concerns early- and mid-eighteenth century Type 2 sonata forms by a variety of composers including Boccherini and Haydn. It identifies a set of modestly scaled syntactic insertions between the medial caesura (MC) and secondary theme areas in major-mode sonata-form movements. They occur in the (unprepared) dominant minor and end on the dominant of that key. After this passage’s conclusion, the secondary theme follows in the dominant major. These insertions are difficult to classify: they form a part of neither the transition nor the secondary theme. This paper will discuss multiple examples of this phenomenon and its potential treatment by Heinrich Christoph Koch, Hepokoski and Darcy, and Caplin.

None of these labels truly captures how a modern listener or analyst perceives the form. Koch’s sonata form, though flexible, lies at too great a historical distance from the modern understanding. An analysis through

Hepokoski and Darcy or Caplin minimizes the effect of the moment by joining it with the normative secondary theme that follows. I propose the term “extrinsic phrase,” which incorporates the flexibility inherent in Koch’s work within the modern conception of sonata form, to describe these insertions. Examples of extrinsic phrases come from a variety of works including: a string trio by Luigi Boccherini (G. 79), a violin sonata by Pierre Gaviniès (op. 3, no. 1) and an early string quartet by Joseph Haydn (op. 1, no. 2).

### **Exploring the IAC as Terminal Cadence: Melodic Deferral and Cadential Function in Selected Late Classical Sonata-Form Movements**

James MacKay (Loyola University, New Orleans)

Due to an interest in a Formenlehre approach to musical structure, there have recently been many philosophical and practical discussions as to what constitutes a cadence. Cadential articulation plays an important role both in the Sonata Theory of James Hepokoski and Warren Darcy, and in William Caplin’s theory of formal functions. Using Caplin’s *Classical Form* as a point of departure, various authors (including Marku Neuwirth, Poundie Burstein, Nathan Martin, and Mark Richards) have explored how cadence shapes form, both in Classical and other repertoire, mindful of Caplin’s caution that not all closure in music is cadential.

In a few Classical-era works, an entire composition, or a large section thereof, ends with an imperfect authentic cadence (IAC), completing the *harmonic motion* back to the tonic, but deferring *melodic* closure until later. This study will examine this technique in selected works by Muzio Clementi (Opus 34/2), Joseph Haydn (“Rider” Quartet) and Ludwig van Beethoven (Opus 110), demonstrating how such closing gestures give the impression of full completion despite the absence of a literal PAC. In sonata movements, if a subordinate theme concludes with an IAC, this formal unit fuses subordinate theme and codetta functions, which I call subordinate theme→codetta, analogous to the main theme/transition formal fusion posited by Caplin. If an entire movement ends with such a cadence, then subsequent movements must provide the missing melodic completion--otherwise, we have a “Romantic Fragment,” to use Charles Rosen’s terminology: a composition that is literally complete, but syntactically, and thus rhetorically, inconclusive.

### **Rachmaninoff’s Nostalgic “Second” Movement of *Rhapsody on a Theme of Paganini*, Op. 43**

Gillian Robertson (University of North Texas)

I interpret the “realm of love” or second movement of *Rhapsody on a Theme of Paganini*, Op. 43 as nostalgic and use it as a case study for illustrating how nostalgia may be signified musically within a work. Drawing on Davis’s simple and reflexive nostalgia, I propose the following three conditions be met for identifying nostalgia in music: 1) the demarcation of time (past from present), 2) an allusion to an idealized past, and 3) the artificiality of the allusion. Hatten’s tropes of temporality (a shift in temporality and a parenthetical insertion) and mapping time onto tonal areas (subdominant = past) demarcate the musical past from the present. Condition two focuses on the yearning for the past and is achieved through the use of musical topics, styles, and instrumentations that are indexical of a particular idealized past. Recognition that the past memory/experience never took place the way we remember it informs condition three; the idealized musical allusion is exaggerated or it incorrectly references the past, revealing the artificial construction of the memory.

The second movement (variations 12–18) acts as a large-scale parenthetical insertion that sets it (the past) apart from the surrounding music. The shift in temporality from the present (movement 1) to the idealized past (movement 2) occurs during the transitional 11th variation. An idealized past is most prominently referenced in variations 12 (lyrical minuet, subdominant D-minor) and 18 (*stile appassionata*, flat subdominant D $\flat$  major), however, inaccuracies in both reveal their artificial nature.