What's New Copycat?: Examining Originality in Pop Music "Sister Hits" through Formal Schemata and Pop Production Techniques
Taylor Stephens (Elon University)

The relationship between originality and production techniques in popular music is seldom analyzed (Lavengood 2017). This theoretical gap in both analytical focus and developed methodologies is problematic because production techniques are critical, structural components of popular song design, and are often a meaningful characteristic which distinguishes songs sharing significant structural similarities. By examining songs that share what I call "formal schemata," defined as melodic and harmonic schema presented in the same structural section of songs, the contribution of production techniques to artistic originality is made more obvious. The present research classifies songs containing identical formal schemata as "sister hits." Though an analysis of formal schemata suggests a lack of originality, an analysis of music production techniques reveals unique and distinctive features between the songs.

This research analyzes the use of production techniques including timbre, equalization, panning, levels, compression, and reverberation in three "sister hit" pairs: "Already Gone" by Kelly Clarkson and "Halo" by Beyoncé; "Brave" by Sara Bareilles and "Roar" by Katy Perry; "Love You Like That" by DAGNY and "Never Really Over" by Katy Perry. After identifying formal schemata in each pairing's musical notation, I review production techniques by creating a "Listening Grid" diagram: a detailed, cubical model which charts the location of each song's musical instruments both from a frequency content perspective and a spatial placement perspective to allow the listener to contextualize the song in a live performance setting. This analysis reveals that the creative teams of each "sister hit" make intentional production decisions to separate their work from other similar works. By examining the role these techniques play in popular music, I more clearly demonstrate the purpose production serves with respect to originality and copyright in the song development process.

The Affect Circumplex and Meaning in Music Fundamentals
Gabriel Fankhauser (University of North Georgia)

Aiming to appeal to a wide audience, this paper demonstrates how basic musical elements can contribute to musical narrative. Specific fundamentals—including intervals, triads, rhythm, and meter—are shown to express meaning in diverse popular songs. The paper first adapts psychologist James Russell's "Affect Circumplex" (1980) of basic emotions to music analysis by correlating emotional valence with tonality or harmony and activation with tempo or time. Using that modified model combined with analysis of specific musical treatments of those coordinates, the paper advocates that instructors include topics of meaning in music fundamentals courses while also demonstrating to non-musicians the potential of music theory to understand how music can express meaning. Music examples include excerpts by Nine Inch Nails, Johnny Cash, Weezer, Ozzy Osbourne, Grandmaster Flash, Rush, and Jackson 5.

Flow in the Alter Egos of Nicki Minaj
Hanisha Kulothparan (Michigan State University)

Alter egos have played a prominent role in the history of rap like Ghostface Killah as Ironman and Tupac as Makaveli. In hip-hop's approach to fiction, the vocal differentiation of

characters is important. Nicki Minaj portrays alter egos in her music, with her most popular personas being "Roman Zolanski" and "Harajuku Barbie." In this presentation, I explore Minaj differentiates these two personas using her vocal pitch, lyrical vocabulary, and the structure of her verses. Ultimately, these elements of her personas align beyond these qualities and relate to the stereotypical portrayals of men and women in rap music.

Kyle Adams (2009) states rappers distinguish their styles through a set of parameters. Looking at specific parameters that are manipulated within Minaj's flow can distinguish her alter egos. Robert Komaniecki argues that "some songs exemplify a high unity of flow, where rappers manipulate their delivery to conform to or differentiate from other artists featured in a song" (2017, 1.3). Minaj differentiates her flow to enhance the stereotypical differences of Roman and Barbie. Finally, Lerdahl and Jackendoff (1983) use grouping preference rules (GPRs) to define how listeners interpret groupings in a passage. I will revise GPR6 (parallelism) to three specific elements of each persona: textual parallelism, rhymed parallelism, and rhythmic parallelism.

Through several elements in her flow, Nicki Minaj is able to differentiates her alter egos, which will be proven through the mentioned methodologies. My revision to L+J's GPR6, I argue, might be useful in analyzing flow in rap music as a whole.

Improvised Structures in the Music of Dave Matthews Band
Micheal Sebulsky (University of Oregon)

Jambands do not stick to the script. Rather than base their live performances off of a fixed studio recording, they continually reimagine and recompose their songs through live-performance improvisation. Songs with no single version acting as Urtext present a problem for formal analysis: how can we describe a song's form if that form is constantly changing? Current methodologies for analyzing form in popular music treat the studio recording as the song's basic form. However, this approach proves insufficient for the jamband repertoire, where studio recordings are, at best, snapshots of a particular performance and, at worst, nonexistent.

In this paper, I offer a new conception of form in jamband music that takes into account the genre's formal fluidity throughout multiple live performances, demonstrated through a case study of the music of the Dave Matthews Band. Throughout this jamband's thirty-year career three jam types surface. The Section jam provides a medium for extended soloing through vast sectional repetition, elongating song lengths while maintaining established grooves. The Extension jam alters established grooves through the implementation of new motivic materials. Interpolation jams create hybrid forms comprising improvised materials and previously composed song-form sections.

When applied to multiple live performances of the same song, form-jam analyses demonstrate both synchronic analyses—focused on a single performance—and diachronic analyses—showcasing the ways in which one song has changed throughout multiple performances. Concertgoers retain previous performance memories as well as studio albums; their pre-conceived understanding of each song will be paradoxically both confirmed and thwarted.

Composition, Improvisation, and Macroharmony in Henry Threadgill's *Sixfivetwo*
Guy Capuzzo (University of North Carolina at Greensboro)

The music of Henry Threadgill (b. 1944), African-American composer/performer and 2016 Pulitzer Prize winner, strikes an innovative balance between composed and improvised elements. His influences include his activities with the Association for the Advancement of Creative Musicians (AACM), Varèse, and Carter. Threadgill's music raises an interesting question about the coexistence of African-American and European traditions in 21st century music: What methods might analysts

use to describe the interaction between harmonic organization and improvisation in non-tonal settings? Building on work by Chad Taylor, Gareth Keany Hill, and Matthew Forker, I contend that attention to *macroharmony* ("a large harmony that subsumes individual chords" [Tymoczko 2011, 6]) will begin to answer this question. I use the *discrete Fourier transform* (DFT) to interpret macroharmonies and their harmonic qualities in *Sixfivetwo* (2018) for string quartet.

The picture that emerges from the analytic examples is one of striking coordinations between improvisation and composed harmonic structure. Macroharmony and the DFT offer a way to probe the interaction of harmonic organization and improvisation in *Sixfivetwo*. The results may lead to a deeper understanding of the music of a composer/performer described by the Pulitzer committee as "among the most important artists in jazz." More broadly, the results may improve our understanding of other nontonal music in which composition, improvisation, European elements, and African-American elements play equal roles, particularly that of other AACM luminaries such as Anthony Braxton and George Lewis.

Salience, Triads, and Transformational Counterpoint in Robert Glasper's Improvisation on "North Portland"
Rich Pellegrin (University of Florida)

This presentation examines the relationship between pitch stability and salience in a performance by Robert Glasper. Triadic voicings such as slash chords and upper structures are highly idiomatic in jazz. With both types, the triads are salient due to their placement in the upper register, but are usually unstable, being comprised mostly or entirely of upper chord tones. Triads may be used similarly in melodic improvisation, where they are more salient than the rhythm section accompaniment. Because there are so many varieties of slash chords and upper structures, a given triad may be used to realize numerous harmonies. When these triadic voicings are used successively, they may form transformational pathways that are worthy of study in their own right, and that counterpoint those of the stable, lower chord tones in intriguing ways. Glasper's improvisation on "North Portland" is replete with triadic formations in the right-hand melodic line and exemplifies this concept of transformational counterpoint.

Lewin's Dubbit, Husserl's Post-horn: A Multistable Model of Polytonal Perception
Derek Myler (Eastman School of Music)

Results of cognitive studies on polytonal perception have been equivocal as to whether listeners can hear multiple tonal centers simultaneously (Krumhansl and Schmuckler, 1986; Thompson and Mor, 1992). From a phenomenological perspective, a methodological drawback of such studies is their reliance on the post-test probe tone paradigm. That is, establishing listeners' retrospective awareness of concurrent keys does little to address the experience of perceiving conflicting tonal centers as polytonal music progresses in real time. In this paper, I aim to reorient the discussion of polytonality around this experience and argue that the perceptual challenge of polytonal discriminability inheres in the ongoing present, resulting in a multistable phenomenon wherein a listener toggles between competing tonal hierarchies.

I take Husserl's account of time-consciousness ([1928] 1991) as the foundation for my multistable model. For Husserl, temporal objects are apprehended within a dynamically unfolding tripartite process of *retention – primal impression – protention* that engenders a certain unity in consciousness. I argue that polytonal music disrupts the unity of Husserl's temporal model, and it is this feature that induces multistable switching between tonal centers. To depict this process, I adapt Lewin's (1986) p-model and ground it explicitly in Husserl's time-diagrams, investigating a network

of temporally situated p-relationships (or P-net). I apply the P-net to excerpts from Ives, Milhaud, Bach, Britten, and Prokofiev. In so doing, I argue that the loose term "polytonality" encompasses a wide spectrum of compositional techniques and I demonstrate the P-net's versatility in exploring the ongoing temporal landscapes of such variegated works.

The Double-Tonic Number System for Current Pop
Eron Smith (Eastman School of Music)

A variety of previous scholars and public media writers have noted the commonality of double-tonic pop songs. However, there has yet to emerge a pedagogical system embracing this hybridity—some scholars use two sets of labels for harmonies/melodies, some use the names for chords in C major/a minor regardless of key, and some use major-key labels as the default (six-based minor). I argue that a major-default system is inappropriate, given that over half of recent Top 100 songs (2015-2019) lean toward the minor tonic and approximately a third use no clear single tonic.

To embrace the both-ness of double-tonic songs, I propose a hybrid number system for songs in the middle of the major-minor continuum: "low 1, low 2, high 1, high 2, 3, 4, 5." This system can be used for labeling bass or melody notes, for singing, or, borrowing from the Nashville number system, for labeling chords — an advantage not available through the similar system of la-based minor. Double-tonic numbers work well for capturing short-range toggling between centers, textural divorce between keys, and ambiguous chord loops. Our labeling systems reflect the way we hear and think about music; different musical traditions warrant different systems. Pop theorists are already working to distance themselves from European classical music theory, identifying new types of "tonic" in current pop. Using double-tonic numbers instead of single-tonic/Roman numeral systems is an important next step for shifting our analytical and pedagogical language to reflect the stylistic features of current music.

Tonal Ambiguity in Mode of Address in Three Wolf *Lieder*
Chandler Blount (Florida State University)

In this paper, I highlight how Wolf treats poetic persona(e) and mode of address (Stein/Spillman 2010) in his settings of Mörike's "Das verlassene Mägdlein," "Der Knabe und das Immlein," and "An den Schlaf." I use prolongational analysis to reveal a particular text-setting schema that Wolf uses to separate poetic narration from text spoken by the poem's protagonist. In these works, Wolf sets poetic narration (or otherwise prefatory text) to tonally ambiguous music that contains an initial descent from scale-step 5 to scale-step 3, with the appearance of the *Kopfton* on scale-step 3 coinciding with a significant shift in mode of address. In the first two *Lieder*, I show small- and large-scale realizations of this schema. I conclude with an analysis of "An den Schlaf," which—despite its tonal and formal ambiguities—similarly contains an initial descent that resolves to the *Kopfton* as the poetry shifts from a self-referential declaration by the speaker to more-objective statements of fact. I develop an interpretation of the piece that features this shared schema while building on (but differing from) previous readings of the work.

A Genus/Species Account of Scale Degrees
Michael Bruschi (Yale University)

Scholars and pedagogues often speak of the "flat" seventh in the aeolian mode, or the "raised" sixth in Dorian. But why should adjectives that imply chromatic alteration be invoked in the cases of two degrees that are naturally occurring in their respective modes? I propose an alternative

way to think about scale degrees that can circumvent these recurrent labeling issues and lead to more rewarding analytical engagements with music in any of the diatonic modes. More specifically, I model scale degrees as ordered triples (x, y, z). The principal purpose of this notation is to disentangle two distinctive aspects of scale-degree experience—what I call "generic scalar position" (x) and "specific modal character" (y)—that are typically conflated together or fused into a representational singleton through the use of sharps, flats, and/or (implied) naturals. Under this notation, x is a plain careted numeral denoting a generalized slot in a heptatonic diatonic scale, y is a *la*-minor solfège syllable specifying how a particular note fits into a governing modal context, and z is an uncareted pitch-class numeral. As I illustrate through three analytical case studies, conceiving of scale degrees in this manner allows one to distinguish more clearly between tonicization and modulation, while also providing an innovative take on the cognitive mechanics of tonal ambiguity. More broadly, my account unhooks the concept of scale degree from its historical dependence on common practice tonality, enabling one to engage more productively with the many modalities of tonality typically heard on a daily basis today.

Dancing with the Devil: Liszt's Diabolical Metric Cycles
Robert Wells (University of Mary Washington)

While Franz Liszt's progressive harmonic, formal, and thematic principles have received great scholarly attention, explorations of his idiosyncratic rhythmic/metric language have been relatively few. The metrically jarring opening to *Totentanz* and curious uses of hypermeter in *Mephisto Waltz No. 1*, however, suggest that Liszt's metric language warrants deeper exploration. Specifically, in both pieces, initial metric tensions are but the start of a larger metric narrative involving cycles of heard downbeats against an underlying notated meter/hypermeter. As such, in the current presentation, I investigate how cycles of shifting heard "downbeats" shape *Totentanz* and the *Mephisto Waltzes* locally and globally.

To accomplish these goals, I will expand upon Ng's (2005; 2006) "hemiolic cycle," which models leftward-shifting heard "downbeats" in triple meter. Because Liszt's metric cycles are not limited to triple meter, I will generalize Ng's hemiolic cycle using Wells's (2017) GIS$_B$, a Lewinian generalized interval system that measures transformations within an idealized notated measure. The resulting "positive/negative n-cycles," where n is the notated meter, will form a backdrop for analyses of these fiery Liszt works. In short, a positive/negative n-cycle is a progressive shift of the apparent "downbeat" by ±1 beat with respect to the notated measure. Through cycle-based analyses of *Totentanz* and *Mephisto Waltzes 1-4*, this presentation will provide new metric insights into Liszt's virtuosic writing while providing new tools for metric analysis writ large.

Hypermetrical Practices in "The Ritual of the Two Rival Tribes"
Lina Sofia Tabak (CUNY Graduate Center)

Although much ink has been spilled concerning local rhythmic events in scenes from the *Rite of Spring*, metrical features above the bar-level are equally fascinating: the same disruptions that take place at the surface level find parallel equivalents at the interpretive level above. However, Stravinsky's hypermetrical manipulations have been largely undertheorized because most scenes do not contain a regular meter, which complicates traditional hypermetrical analysis where periodicity is a prerequisite.

In this paper, I argue that "deletions" and "insertions," proposed by Gretchen Horlacher to analyze the lack of periodicity in Stravinsky's works, can also be applied as transformations in order to create a metrically regular melodic prototype. Applying these transformations to Stravinsky's

metrically shifting passages in the *Rite of Spring*'s "The Ritual of the Two Rival Tribes" enables a more traditional hypermetrical interpretation of the scene. Furthermore, the same transformations can regularize the hypermeter as well, and thus can create metrically normalized melodies at both the surface and the hypermetrical levels. Not only does the analysis of background hypermeter through "insertions" and "deletions" in "The Ritual of the Two Rival Tribes" shed light on Stravinsky's specific rhythmic practices, but it also paves the way for a new understanding of hypermeter in music with constantly changing surface meter.

Motivic Transference in Julia Perry's *Stabat Mater*
John Combs (Florida State University)

Motivic analysis tends to approach motives/themes as discrete entities, highlighting similarities and transformations in pitch and pitch-class interval, contour, source set, and transformational operation. This paper develops a methodology that allows one to analyze motives with attention to musical linearity over spans of varying lengths. Building on Hanninen's (2012) tools for contextual association and segmentation, this paper separates portrait and temporal stances for motivic analysis. A portrait stance approaches a piece of music as a completed whole, relating musical ideas atemporally. A temporal stance holds that musical ideas accrue meaning from and are influenced by all music that came before in a piece.

To clarify motivic relationships from a temporal stance, I define a process called motivic transference, which is an association between instances of a motive and the intervening music based on musical chronology and supported by temporal criteria. Three conditions should be met in order to identify motivic transference: (1) the appearance and recurrence of a motive, (2) the existence of musically salient intervening music, and (3) recognition of the scope or level of one's temporal stance. Because salient musical criteria associated with intervening material and a motivic recurrence may be similar or different, I describe two types of motivic transference: correspondence transference and contrast transference.

Through illustrations of these concepts with examples from Julia Perry's *Stabat Mater*, I show how transference broadens our understanding of motivic recurrence and provides analytical justification for motivic relationships between heterogeneous material.

Mixed Signals: Schematic and Form-Functional Ambiguity
in the Keyboard Fantasias of C. P. E. Bach
Alan Elkins (Florida State University)

The free fantasias of C.P.E. Bach had a powerful impact on his listeners, eliciting both praise and censure for their departures from standard instrumental forms. Previous scholarship has acknowledged the ways in which Bach's treatment of form in the free fantasia differs from more formularized genres, emphasizing liberties taken with meter, thematic material, and modulation (Head 1995; Richards 2001). However, some aspects of the fantasias are more closely in dialogue with conventional practices than is often stated, and little has been done to more systematically show the ways in which Bach evokes—and subsequently undercuts—the formal and schematic expectations that would have been familiar to his listeners.

Building on William Caplin's work on formal function in Classical-era fantasias (Caplin 2018) and Robert Gjerdingen's research on galant schemata (Gjerdingen 2007), I will show how C.P.E. Bach's fantasias engage with eighteenth-century phrase-structural conventions while subverting them in ways that confound form-functional notions of beginning, middle, and end. I will focus on three of Bach's strategies for altering the expected formal function of a passage: by tweaking an existing

schema to alter its form-functional properties, by overlapping musical features that project contradictory formal functions, and by placing conventional harmonic paradigms in unconventional places. Bach's invocation of galant phrase-structural conventions allowed him to play with the expectations of his listeners, resulting in music that sounded "free" while remaining comprehensible and striking a balance between the familiar and the unexpected.

Transposed Repetition of Thematic Patterns in Franck
Despoina Panagiotidou (Indiana University)

This presentation addresses issues of musical form and temporality in the 19th-century through the music of César Franck (1822–1890). Transposed repetition of thematic patterns is used as an expositional technique in Franck's late works. Acting as a modulatory sequence with thematic rhetoric, transposed repetition of themes creates a paradox of progressive temporal experience blurring the sense of formal functions traditionally associated with sonata form. Such sequential passages serve expository purposes, while creating a balance between predictability and difference. Building on binary oppositions about musical temporality like *lyric* and *progressive* time, and the notions of synchrony and diachrony introduced by Monelle (2000) and Waltham-Smith (2019) respectively, I explore how Franck's thematic utterances entail a developing character. Through the analysis of four excerpts by Franck, I argue that transposed repetition of thematic material plays a structural role in shaping and individuating a musical composition within nineteenth-century aesthetics, acting as an agent of formal narrative while disrupting functional coherence and tonal centrality.

"Isn't it queer?": The Kinsey Sicks and the Art of Parody
J. Daniel Jenkins (University of South Carolina)

The Kinsey Sicks, four men in drag, self-styled as "America's Favorite Dragapella Beauty Shop Quartet®," have been harmonizing for over 25 years. To achieve their dead-on song parodies, the Kinseys rely on a listener's familiarity with the original songs. The parodic effect is often heightened by vocal arrangements that attempt to replicate the musical content as faithfully as possible.

"Send in the Clones," a parody of Sondheim's "Send in the Clowns," is one of very few examples where they reimagine the musical components of a song. The Kinseys begin "Send in the Clones" by fulfilling many of the expectations of typical performances of Sondheim's original, what Zbikowski (2002) calls Type-1 performances. However, they soon transition to an up-tempo, doo-wop inspired Type-2 performance.

Interpreting the up-tempo music as doo-wop amplifies the lyrics' ironic and satirical tone. By implying that the eponymous clones are in step with music from the 1950s, a time when gender roles were much more narrowly defined, the Kinseys confront what Duggan (2003) calls "homonormativity," the supposition that heteronormative ideals should be replicated in the queer community. The lyrics draw attention to this when the clones admonish others for acting "nelly," making "straight-acting" oppositional to "queer." The Kinseys echo Duggan's diagnosis that the urge to gain acceptance by reinscribing the norms of a predominately heterosexual society is grounded in the neoliberal impulses of the dominant culture. In so doing, they question the homonormative idea that there is only one acceptable way to be a gay man in America.

Deviant Causal Choruses in My Bloody Valentine's *Loveless*
Tyler Osborne (University of Oregon)

Critics regarded shoegaze, a subgenre of Brit-rock, as "a challenging storm of bent pitch" and "ear-baffling…symphonic chaos." Amidst the storms and chaos, where does the listener focus when "focus" might be the very antithesis of the genre? I explore My Bloody Valentine's 1991 album, *Loveless*, to examine how obscured vocals affect teleological trajectories. Specifically, how form is organized when the text is not a primary narrative focus.

My Bloody Valentine's vocal approach creates a compelling dialogue with prototypical popular music form. As voices blend with instruments, traditional verse-chorus form erodes, creating moments that are chorus-like, but lack criteria many regard as necessary for this formal section, resulting in what I call the *Deviant Causal Chorus* (DCC). I propose two types of DCCs that occur through vocal obfuscation. The first DCC type retains the human voice within chorus's formal function, but buries the vocals within the musical texture, changing the voice's role between the verse and chorus by altering the vocal quality and removing lyrical content. A second DCC type removes the human voice completely and moves directly to a chorus-evoking instrumental section, resulting in an instrumental break that can be as aesthetically fulfilling as a traditional vocal chorus.

The DCC draws attention to a prominent aesthetic trait of shoegaze: a large-scale lack of teleology. As scholarship on teleology in popular music expands, one must consider how to approach form when the voice ceases to be the song's most significant aesthetic concern and look beyond the vocals for form-functional labels.

Compound Bridge Sections in Rock and Metal Music
Michael Dekovich (University of Oregon)

Since the 1970s, rock music has been dominated by verse-chorus-bridge form. Popular music scholars have described the bridge section as tasked with contrasting and connecting verse-chorus cycles. However, beyond this perfunctory form-functional reading lies a wealth of expressive strategies bounded by a unique type of multi-sectional bridge that I call the *compound bridge section*. In contrast to simple bridge sections—which are often as short as eight bars—compound bridges lengthen a song by stringing together several independent sections, creating space to feature special compositional techniques. These expanded bridges often contain displays of virtuosity and experimentalism. Heavy metal bands have also developed the compound bridge to create musical goals outside of the verse-chorus cyclical telos by including genre-specific formal functions such as breakdowns. In such instances, formal elements bounded by the compound bridge can supersede the teleology of the chorus. Thus, contrary to definitions of the bridge as a connector between verse-chorus rotations, bridges may even conclude a song. Because compound bridges in rock and metal contain solo and breakdown sections which shape listener expectations and constitute moments of arrival, their unique design alters the teleology of verse-chorus-bridge forms and establishes unique formal types. The concept of the compound bridge can therefore enrich the understanding not only of how formal schemata are elaborated in rock and metal, but also the process of creating new forms.

Liminal Synths: Sonic Pre-Histories and The Search for Legitimacy
Jennifer Iverson (University of Chicago)

Electronic sound pervades our experiences: A sci-fi thriller opens with electronic whirrs, clicks, and hums, as listeners are dropped in to the film's technologically saturated future world.

Top-40 hits radio perpetually resuscitates sounds of early synthesizers like the Moog and DX-7. Teenagers gather at clubs to lose themselves in the trance-inducing loops of DJ-produced electronic dance music. How did electronic sound become so ubiquitous? This talk focuses on liminal moments in electronic music history, before such canonical scenes solidified. In two case studies—the Barron studio in NYC, and early Moog cover albums—I explore the uncertainty that circulates with new instruments. New electronic instruments feature a porosity of design—an openness to new technologies and affordances—as well as a porosity in use value. Focusing upon liminal uses, especially in genre-crossings and dust-bin experiments, this talk asks how electronic experiments gain legitimacy—or don't. Ultimately, I show that electronic instruments and sounds mediate ideologies that are aesthetic, economic, and political in nature. These dynamic, multi-faceted negotiations, if they succeed, make electronic music legitimate and ubiquitous.