Fugitive Music Theory and George Russell's Theory of Tonal Gravity

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This article theorizes a network of "fugitive music theory" and examines George Russell's *Lydian Chromatic Concept of Tonal Organization* (1953) as a case study. Fugitive music theory represents a genealogy of texts, concepts, and people that suggests we fundamentally rethink who and what counts as music theory, and Russell provides a profound theory of tonality that intervenes in our field's current approaches to this topic and repertoire. After outlining some of Russell's core concepts, several analyses demonstrate the utility of his theory using excerpts from various tonal compositions, including those by William Grant Still, Marion Bauer, Howard Swanson, Margaret Bonds, Richard Strauss, and Charles Ives. This article seeks to unearth and redress anti-Black racism in music theory, even as it also discusses the challenges of doing this work.

Introduction

Who counts as a music theorist, what counts as music theory, and what are the conditions of "getting to count?"[1] Answers to these questions emerge implicitly from both our discipline's history, which canonizes the field, and contemporary publications and pedagogical practices, which capture the state of the field and suggest future directions. Combining these perspectives provides a general snapshot of music theory's core thinkers, texts, and ideas.

Viewed through these lenses, music theory is overwhelmingly white. The demographics of the Society for Music Theory (SMT), its history of publication awards, those who publish in and edit our flagship journals, and the theorists and composers who dominate our field's research, graduate and undergraduate textbooks, syllabi, and classrooms unequivocally demonstrate that white men and their ideas dominate our discipline, historically and currently (Ewell 2020).[2] From Guido d'Arezzo, Johann Joseph Fux, and Johann Kirnberger, through Hugo Riemann, Heinrich Schenker, and Arnold Schoenberg, to Milton Babbitt, Allen Forte, and David Lewin, white men not only permeate our courses and textbooks, their ideas serve as the core of our discipline. Our field is white and male in terms of both representation and epistemology.

Music theory's elevation of white male theorists reflects systemic racism and misogyny. Racism and misogyny shape systems of power that structure opportunity

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1 These opening questions are inspired by Hisama's "Getting to Count" (2021).

2 SMT's 2021 Annual Report on Membership Demographics shows that out of 1,028 members, 61.09 percent identify as male, and 72.28 percent identify as white. For additional data and analysis, see https://societymusictheory.org/administration/demographics.

and assign value based on socially contingent constructions of identity (Jones 2002; Cook 2016). Our discipline's history and contemporary activity prioritizes the work of white men over work by Black, Indigenous, and other people of color of all genders. Undoing this parochialism is important because there are many musical theories that are systematically effaced every time we uncritically (re)present this white male music-theoretical canon. By redressing this inequity, we can welcome new analytical and theoretical perspectives, expand music theory's canon, and foster more welcoming scholarly and learning environments.

Engaging with the work of nonwhite music theorists complements the more common approach of including Black, Indigenous, and other composers of color in our classrooms and scholarship while maintaining Eurocentric theoretical frameworks. Although discussing and analyzing the work of these composers is extremely important and should be normalized, many scholars of Black music emphasize that this repertoire necessitates new analytical methodologies. For example, Horace J. Maxile, Jr. outlines a theory that combines the work of Samuel A. Floyd, Jr. (1995) and Henry Louis Gates, Jr. (1988) with musical semiotics (Maxile 2008, 2011, 2013, 2014).[3] His method generates powerful and prescient analytical insights that attend to both the musical surface and larger socio-cultural contexts. Ellie Hisama's (2015) groundbreaking analyses of Julius Eastman's work posit multifaceted connections between his music and racial and sexual identity. Hisama's chapter also emerges from her sustained efforts to resist music theory's musical and epistemological narrowness (2000, 2001, 2018a, 2018b). Braxton D. Shelley's virtuosic analyses of music from the Black gospel tradition open a space for understanding some of "gospel music's participatory, experiential, formal, and hermeneutic dimensions" (2019, 185).[4] The collective work of these (and other) scholars offers compelling alternatives to those traditional analytical methodologies that are intimately linked to the "closely guarded Western canon" (Maxile 2008, 124) and perpetuate music theory's "white racial frame" (Ewell 2020, 2021).

This article outlines a broad network of music theorists and theoretical practices that I conceptualize as "fugitive music theory." This expansive set of practices encompasses three modalities: first, original texts; second, engagements with preexisting music-theoretical texts; and last, metaphorical and metaphysical descriptions that serve as points of departure for analysis. Importantly, these modes overlap in practice to create rich and complex quilts of texts, influences, appropriations, and concepts. In the first half of this article, I outline my notion of fugitive music theory. The second half explores George Russell's *Lydian Chromatic Concept of Tonal Organization* (1953) as

3 See the analysis of Harry T. Burleigh's "A Jubilee" by Maxile, Jr. in this volume.

4 See also Shelley (2017, 2020).

a representative case study. I focus primarily on race in this article, although fugitive music theory is intersectional in its purview.[5]

George Russell (1923–2009) was a composer, pianist, and music theorist who led numerous ensembles throughout his storied career. He was most active in and around New York City, although he lived in Scandinavia beginning in 1964, returning to the United States in 1969 to live in Boston and teach at the New England Conservatory. Russell famously influenced the development of "modal jazz" in the 1950s and was close to musicians such as Ornette Coleman, John Coltrane, Miles Davis, Bill Evans, and Gunther Schuller. He was a fellow of the Guggenheim Foundation in 1969 and 1972, received the MacArthur Foundation's "Genius Grant" in 1989, and was a "Jazz Master" awardee for the National Endowment for the Arts in 1990.[6] Duncan Heining's (2020) biography offers further overview of Russell's life and work, including a substantial discography.

Although I endeavor to champion Russell's work with integrity, respect, and humility, my positionality as a straight, white, cisgendered, male scholar also simultaneously reproduces music theory's exclusionary history that welcomes voices like mine and regards those like Russell and others with suspicion. I remain mindful of Sara Ahmed's warning against antiracist work by white authors becoming "white pride"; that is, an opportunity for white people to congratulate and promote themselves (2012, 170). I aim not to essentialize or ventriloquize these thinkers: my perspective is one of many and continues to develop as I work with these ideas, texts, and musics. Ideally, my project will generate additional engagements that strive for greater equity in our field, universities, and societies, helping to dissolve whiteness's dominance in the process.

Fugitive music theory

Fugitive music theory is my term for a genealogy of music-theoretical activity that participates in larger mechanisms of Black cultural production, affirms Black life and agency, and critiques white supremacy and its attempts at containment. I focus on African American music theorists in my work, but fugitive music theory does not presuppose race and/or ethnicity. It demands careful consideration of social and political

5 Kimberlé Crenshaw (1989) first introduced the concept of intersectionality to analyze the intertwining of race and gender in lived experience, as well as antidiscrimination law's treatment of those axes as mutually exclusive. Patricia Hill Collins and Sirma Bilge (2016) note that intersectionality addresses ways that multiple facets of identity—including race, ethnicity, gender, sexuality, class, nationhood, and (dis)ability—interact with axes of power and oppression. As a conceptual mapping of a heterogenous genealogy of theoretical practices, fugitive music theory embraces the complex and varied interactions of identity and power.

6 See https://www.gf.org/fellows/all-fellows/george-russell/, https://www.macfound.org/fellows/class-of-1989/george-russell, and https://www.arts.gov/honors/jazz/george-russell.

contexts, as well as modes of production, distribution, and reception. Applications of this idea to other groups that suffer under white supremacy also require careful analysis of those particular settings.

I borrow the concept of "fugitivity" from work in critical race theory, Black studies, and postcolonial studies that theorizes a history of domination, resistance, subjugation, migration, and diaspora. Fugitivity connects to insurgent practices that resist capture and containment within physical spaces, such as the slave ship and its hold, plantation, state, prison, ghetto, school, or side entrance; onto-epistemological spaces that designate or withhold personhood, the right to participate in political processes, or the right to own property (physical or intellectual); and conceptual designations that attempt to undermine and delegitimize, such as drawing strict boundaries around Western art music and its theories in order to denigrate and exclude Black music and its intellectual tradition. Fugitivity embodies both the biological and sociopolitical stakes of crossing these literal and figurative borders as assertions of agency and personhood; it overflows designated scenes of containment (Moten 2003, 26) and "nonbeing," refusing jurisdiction (Fanon [1952] 2008, xii). These reiterative flights from captivity—what Jack Halberstam characterizes in his introduction to Stefano Harney and Fred Moten's *The Undercommons: Fugitive Planning & Black Study* (2013) as "being separate from settling" (11)—manifest in multiple domains: stealing away, or "unlicensed movement, collective assembly, and an abrogation of the terms of subjection" (Hartman 1997, 67); hiding, or "agency that is interdicted, caught in the interval, but no less real" (Moten 2017, 68); and literal or figurative travels, such as trips to historical slave trade sites (Commander 2017), Sun Ra's intergalactic sojourns (Eshun 1998; Szwed 1997; Youngquist 2016), and the refusal to operate within defined boundaries of musical genres, as evidenced by artists like Anthony Braxton and Mary Lou Williams (Braxton 1985, 1988; Kernodle 2004; Lock [1988] 2018). These "ceaseless reconfigurations of resistance to elide racism and its attendant systems of domination" undermine efforts of containment, opening up alternate new spaces of being (Commander 2017, 5). Importantly, these various configurations of escape from subjection are ongoing, emerging from slavery's long aftermath, or what Christina Sharpe (2016) calls its "wake."

Ignoring or dismissing African American music theorists participates in a long tradition of denying and undermining African Americans' faculties of reason and intellectual capacity, a tactic that both helped justify slavery and influences the reception of African American creativity beyond so-called abolition. Ida B. Wells famously observes that the world "stamps us as a race of cut-throats, robbers and lustful wild beasts" (Wells [1892] 2013, 39). Frantz Fanon connects these tropes to jazz in the

United States (bebop, specifically), stating that white America would prefer that bebop musicians conform to an image of "the broken, desperate . . . old 'Negro,' five whiskeys under his belt, bemoaning his own misfortune" ([1961] 2004, 176). Anthony Braxton comments on the racialized reception of his creative practice: "Why is it so natural for [white saxophonist] Evan Parker, say, to have an appreciation of Coltrane, but for me to have an appreciation of Stockhausen is somehow out of the natural order of human experience? I see it as racist" (Lock [1988] 2018, 92). Contemporary scholars such as Daphne A. Brooks (2006), Bernard Gendron (2002), George E. Lewis (2000, [1996] 2004, [2004] 2015), Eric Lott (1993), Matthew D. Morrison (2017, 2019), Guthrie P. Ramsey, Jr. (2003, 2007), and Katrina Dyonne Thompson (2014) explore additional ways that anti-Black racism inheres in judgments about Black musicians, performers, and thinkers in multifarious spheres.

Fugitive music theory counters simplistic and essentialist characterizations of Black music and people as non- or anti-intellectual while also presenting alternative, expansive music-theoretical spaces. It therefore appropriates theoretical norms (texts, mediums, methods) when advantageous, but also overflows them, operating "between normativity and the deconstruction of norms" (Moten 2008, 178). I draw on James Gordon Williams's deft theorization of Black musical space as both "rooted in critiquing the social systems that have marginalized" Black people and something that "reflects the radical imagination for a better future" (2021, 6). Williams's focus on performance parallels the kinds of theoretical spaces inhabited by fugitive music theorists. Similarly, Britt Rusert's notion of fugitive science traces and explores the "dynamic scientific engagements and experiments of black writers, performers, artists, and other cultural producers who mobilized natural science and produced alternative knowledges in the quest for and name of freedom" (2017, 4).[7] By producing knowledge, Rusert argues, African Americans resist the "object" status assigned to them by white supremacy (5), a point echoed by Jarvis R. Givens in *Fugitive Pedagogy: Carter G. Woodson and the Art of Black Teaching* (2021, 10). Conceptualizing Russell and other fugitive music theorists in these terms connects them to a long tradition of insurgent intellectual and creative engagement.

Fugitive music theory represents a specific manifestation of what Harney and Moten (2013) call "black study." Their theorization suggests that we reassess the activities, environments, and contexts for music-theoretical activity, the scenes of collective and individual "speculative practice" (110). Although in this article I focus primarily on Russell, I borrow Harney and Moten's notion of "black study" to attend

7 I am grateful to ethnomusicologist Mark Lomanno, who introduced me to Rusert's monograph; see also Lomanno (2017).

to fugitive music theory's often collaborative nature.[8] I also note its non- and counter-institutional settings, such as community halls, kitchens, living rooms, rehearsal and performance spaces, sidewalks, buses, subways, after-hours bars, private practice rooms, and hospitals.

Harney and Moten's "being separate from settling" also implies a mode of flight or escape that fugitive music theory embodies in its resistance to easy readings and straightforward adaptations. Put another way, fugitive music theory "escapes" recapture by music theorists and institutions looking to appropriate these ideas in the name of diversity work. It does so, in part, through its opacity, following Édouard Glissant ([1990] 2010). The colonial gaze, writes Glissant, "reduces" difference, rendering it "transparent" (189–90). This reduction assimilates difference into dominant onto-epistemological framings and reinscribes colonial power relations. Resisting the colonial gaze, in contrast, means insisting "not merely to the right to difference but . . . also to the right to opacity that is not enclosure within an impenetrable autarchy but subsistence within an irreducible singularity" (190). Opacity is thus a means of resisting "enclosure" and capture.

Russell's fugitive text, *Lydian Chromatic Concept of Tonal Organization*, embodies this opacity in multiple ways. First, its mode of exposition is complex and enigmatic. Readers must constantly skip around in the text to compare Russell's explanations. He often restates previous points using new language, but these moments are not redundant: they add additional conceptual layers that the reader must carefully tease out. Second, Russell's theory demands aural and embodied engagement. Many of his theoretical ideas are best explored by improvising melodies in relation to harmonic progressions rather than simply "understanding" them on a cerebral level. This embodied understanding undermines reductive efforts to comprehend Russell's theory through simply reading the text. Russell emphasizes embodied modes of learning—what he calls "intuitive intelligence"—in his book, stating that "definitions of intelligence that exclude intuitive intelligence . . . [omit] an existing reality (although unseen) that has guided and given permanence to the soul of humanity down through the ages" ([1953] 2001, 167–68). Third, Russell's text is permeated with metaphysical elements that cannot be separated from its music-theoretical ones. His theory's emphasis on unified, vertical harmony, for example, stems from his study of Russian philosopher and mystic George Ivanovich Gurdjieff (1866?–1949). Thus, engagement with the Lydian Chromatic Concept requires that theorists acquaint themselves with

8 Russell received immense support from Alice Russell (née Norbury), who he met in 1976 and married in 1981 (Heining 2020, 233). She helped manage Russell's career and has been hugely important in keeping his work in print after his death.

the temporal modalities in Gurdjieff's work (as well as the work of his disciples Maurice Nicoll and Pyotr Demianovich Ouspensky).[9] Finally, Russell's theory is bound to each reader's personal application of it.[10] Russell's theory often facilitates multiple analytical interpretations of a single musical excerpt; deciding which one to pursue involves paying close attention to the excerpt's sound.[11] This foregrounding of personal interpretation means that Russell's book avoids straightforward, objective analytical answers. Rather, it offers a range of theoretical concepts that the analyst selects as they see fit, thus foregrounding the personal and subjective in analysis.

This article merely introduces some of the foundational components of Russell's theory; it is not comprehensive, and it is certainly not a sufficient guide on its own. Readers wishing to incorporate Russell's ideas must dedicate significant time and energy to them.[12] These challenges notwithstanding, my article frames the Lydian Chromatic Concept of Tonal Organization as a theory of tonality applicable to a broad range of music that could form part of a larger response to undermining white supremacy in our discipline. I return to these issues in my conclusion.

George Russell's path to "The Concept"

Russell's path to his theoretical magnum opus was charged by an encounter in the first half of 1945 with Miles Davis, who answered Russell's question about his musical goals by stating that he wanted "to learn [to play] all the changes (chords)" (Russell [1953] 2001, 10). Davis already possessed considerable harmonic knowledge at the time; he was performing in various New York jazz venues and had famously attended Juilliard the year before. His "all" in "all the changes" therefore points to harmonic knowledge that exceeds Western art music theory and bebop; it expresses a

9 Nicoll (1884–1953) was a Scottish doctor and renowned teacher of Gurdjieff's "Fourth Way" in London. Ouspensky (1878–1947) was a Russian author who studied with Gurdjieff for ten years and shared many of his ideas in both Europe and the United States. Samuel Copley's biography of Nicoll is tellingly titled *Portrait of a Vertical Man* (1989)—a description that could also apply to Russell. Andy Wasserman notes that Russell adapted the notion of verticality from his study of these thinkers.

10 Wasserman reinforces this point in his foreword to the fourth edition of *Lydian Chromatic Concept of Tonal Organization* when he states that studying Russell's work asks the reader to "begin to unearth a vision of your innate 'response-abilities' within your musical discipline" ([1953] 2001, xi).

11 Although I do not discuss Russell's conception of horizontal tonal gravity in this article, this concept provides a vivid illustration of personal interpretation's importance in his theory. Horizontal tonal gravity expresses music's "goal directedness" in a way that vertical tonal gravity does not. Russell does not offer definitive guidelines for deciding whether a given melody expresses verticality or horizontality, although the presence of a raised fourth scale degree is an indicator of verticality and the natural fourth scale degree is an indicator of horizontality. When deciding which concept to apply to a passage in our lessons together, Wasserman would often ask, "Well, what does it sound like to you?"

12 As an illustration of the required time, it took Wasserman and I twelve months of weekly sessions, each two to three hours long, to read the entire book.

desire to relate any pitch to any harmony. Russell had already received training in music theory's fundamentals from bassist Harold Gaston, an early musical associate in his hometown of Cincinnati, Ohio, and his roommate while they were being treated for tuberculosis (Heining 2020, 46–48).[13] This knowledge helped Russell begin his career as a jazz pianist, composer, and arranger in New York City in the early 1940s and equipped him to consider Davis's proposition from a theoretical perspective.

The summer of 1945 provided both a blessing and curse for Russell. His uncured tuberculosis sent him to St. Joseph's Hospital in the Bronx, where he stayed for fifteen months (Heining 2020, 62). His corner bed and the cramped ward facilitated deep rumination on Davis's words. After six months Russell could leave his bed and use a nearby piano to begin testing various musical responses. His incessant playing of the C major triad and C major scale led nurses to move him (and the piano) to the library, where he "finally decided that the major scale just doesn't cut it. . . . It doesn't sound a unity with its major chord" (quoted in Heining 2020, 63). He also soon discovered that the tonic of the major scale does not anchor a chain of ascending perfect fifths but that the tonic of the lydian scale does.[14] Furthermore, "the Lydian [*does*] sound a unity," because its raised fourth scale degree neutralizes the resolution of the major scale's natural fourth degree downward by a step, as I elucidate below (quoted in Heining 2020, 63; emphasis mine). This inductive process of "black study"—fugitive music theory transpiring in a tuberculosis ward rather than in a formal musical society, research center, or university music department—led Russell to posit that the lydian scale best expresses the unity of the major chord with the same tonic, the axiom that undergirds his theory.

Russell's path to the first edition of *Lydian Chromatic Concept of Tonal Organization* in 1953 through to his fourth and final edition in 2001 involves numerous, similar periods of intense research, introspection, and experimentation. Russell recognized the challenge his theory (known simply as "The Concept") posed to Western art music theory and doubted that "a black man would be taken seriously" (Heining 2010, 78). At the same time, Russell embraced the notion that The Concept was founded on universal principles that account for all music, transcending the particulars of Western art music. His descriptions of his theory as universal and

13 Heining provides some additional information on Gaston, who attended Cincinnati's Cosmopolitan School of Music, founded by Artie Matthews to provide African Americans access to musical training. Gaston received a call from Duke Ellington to replace Jimmy Blanton in his band (Heining 2020, 31–34). Sadly, Gaston died in 1941 from tuberculosis before he was able to join (48–50).

14 The C lydian scale, for example, can be arranged so that C anchors a ladder of ascending perfect fifths: C–G–D–A–E–B–F♯. The C major scale breaks this chain because the final pitch, F♮, sits a *diminished* fifth above the preceding B.

objective received reinforcement from his study of Gurdjieff. Jon Woodson (1999) notes Gurdjieff's influence on the Harlem Renaissance, which probably resonated through later generations of African American artists and musicians, and Anna Gawboy (2020) explores Gurdjieff's influence on Sun Ra. Russell's use of "objective," "scientific," and "universal" to describe his theory connects to this intellectual tradition, wresting common associations of these terms away from Western art music theory epistemologies.[15]

Russell's *Lydian Chromatic Concept of Tonal Organization* appears in four editions: as a 1953 pamphlet, as spiral-bound book editions in 1959 and 1971, and as a hardcover edition in 2001. The 2001 edition represents the definitive version of his theory. Russell realized in the early 1980s that The Concept had not received as much attention from outside the jazz world as he had hoped and began revising accordingly. Earlier editions, in Russell's view, underemphasized his theory's "pan-stylism" and overemphasized jazz improvisation.[16] He therefore included analyses of music by J. S. Bach, Claude Debussy, and Maurice Ravel; clarified his terminology and pan-stylistic focus; contextualized his ideas in relation to the creative practices of Duke Ellington, Arnold Schoenberg, Igor Stravinsky, and Richard Wagner, among others; and removed "*for Improvisation*" from the original title. The 1959 edition opens by stating, "The Lydian Chromatic Concept is an organization of tonal resources from which the jazz musician may draw to create his improvised lines" ([1953] 1959, 1). The 2001 version, in contrast, states that his theory addresses tonality writ large, irrespective of musical genre ([1953] 2001, 10–11).[17] Once he began work on a fourth edition in the late 1980s, Russell wished to remove all preceding versions from circulation, since he regarded them as outmoded. He requested that both new and continuing students purchase the new edition for their studies. Despite work on The Concept's historical and cultural resonances by scholars such as Jason Bivins (2015), Peter Burt (2002), Brigid Cohen

15 In a 2006 article in the *New York City Jazz Record*, Russell states, "The foundation of the concept is that the Lydian scale is the true scientific scale, in the sense that it gives birth to the basic unit of tonal gravity, which is the interval of the fifth. That's how music behaves. There's nothing there [in my theory] because I like it. I don't speak as its author; I speak as a conduit. It was already there, but I do think that I was on its wavelength to pick it up" (Hazell 2006, 11).

16 Russell's theory was filtered through various influences—particularly David Baker and Jamey Aebersold—to become a foundational influence on chord-scale theory and university jazz programs at Indiana University Bloomington, New England Conservatory, and Berklee College of Music. Chord-scale theory is only distantly related to Russell's actual work, however, and largely erases the creative, spiritual, and experimental components of his approach. It has nonetheless had an outsized influence on Russell's reputation, retrospectively and misleadingly casting his theory as a simple process of associating scales with chords for use in improvisation. For more on Russell's influence on Aebersold, see Thibeault (2021). Russell's theory was also taught at Southern Illinois University, University of La Verne, and Uppsala University (Sweden). See below for a discussion of certified teachers.

17 All editions were self-published by Russell's publishing company, Concept Publishing.

(2012), Ingrid Monson (1998), and Eric Porter (2008), Russell's theory remains linked primarily to jazz. Although earlier editions of Russell's book are historically important, contemporary applications of his theory should take the fourth and final edition as their point of departure.

My engagement with Russell's theory stems from my study of his text as well as ongoing, weekly private lessons with Andy Wasserman, who Russell personally certified to teach The Concept in its entirety and served as editorial assistant for the fourth edition.[18] My lessons furnish insights unavailable from the text alone, which Wasserman states Russell designed for use alongside lessons with the author or a certified instructor.[19] Russell also intended to publish a second volume, which would expand on his idea of "horizontal tonal gravity." Its absence makes conversation with figures such as Wasserman indispensable for exploring the ways that Russell's work redirects tonal analysis.[20]

The importance of oral testimony in this work also reflects fugitive music theory's often ambivalent attitude toward the kinds of written documents typically prioritized by music theorists and universities. Fugitive music theory does not inhere solely in written artifacts such as monographs and journal articles: as "black study," it participates in broader milieus that include transmission via speech, social interaction, and/or musical practice. This breadth of medium necessitates methodological openness and underlies my decision to include oral testimony in this work.

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18 These lessons began with an initial phone call on August 6, 2020, and began in earnest on September 24, 2020. Lessons consisted of reading through and discussing aspects of Russell's book, including background information not available in the text. Russell's letter of recommendation for Wasserman states, "He is one of very few people qualified to teach the Lydian Chromatic Concept in its entirety" (https://andywasserman.com/music-theory/george-russell-s-lydian-chromatic-concept).

19 Wasserman states that Russell was utterly opposed to the idea that students could learn music purely through method books of any kind. There is no comprehensive list of certified instructors of The Concept at the time of this article's writing. Russell's lectures and seminars throughout the United States, Canada, Western Europe, Scandinavia, and Japan led him to personally certify a handful of teachers. A complete list of these certifications is indeterminable. In the United States, in addition to Wasserman, Gregg Ramsey, Marc Rossi, and Prince Wells, among others, have certification, although only Wasserman publicly displays Russell's written endorsement (the letter mentioned above). Russell envisioned a central hub for education and research related to The Concept. Realizing this vision, the Institute for Lydian Chromatic Studies was launched in 2021, with Wasserman as director (https://www.instituteforcreativity.org/gr-ilcs). In April of 2022, I became the first person certified by the Institute to teach the Lydian Chromatic Concept.

20 Any misrepresentations or mistakes in this article are, however, my own and should not be attributed to Wasserman.

An introduction to tonal gravity

The primary concept in Russell's book is "tonal gravity," which describes a field of close-to-distant pitch relations anchored by a "lydian tonic." These relations exist on a spectrum of "ingoing" (closer to the lydian tonic) and "outgoing" (further from the lydian tonic), which replaces the consonant/dissonant binary in Western music theory. Russell focuses on "vertical tonal gravity," which expresses the complete, unified sound of a given pitch class set. This emphasis on a unified vertical field balances Western music theory's focus on "the active, linear, goal-oriented, horizontal mind set" ([1953] 2001, 214). Thus, for any given pitch class set, Russell's theory posits a lydian tonic and field of close-to-distant relations that fully express that set's unified vertical sonority.

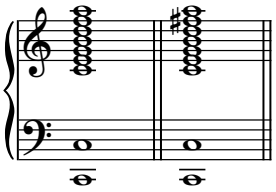
Russell's most vertically unified expression of a single pitch-class is the tertian arrangement of the lydian collection built from that pitch class ([1953] 2001, 1). For example, C_4–E_4–G_4–B_4–D_5–$F\sharp_5$–A_5 expresses the greatest "degree of unity and finality" for the pitch class C as tonic.[21] Russell supports this claim in two ways. First, he recounts numerous ear-training tests in which he plays a C_2–C_3 octave followed by two stacks of thirds built from C_4—the first using the C major collection and then the C lydian collection—and asks students which chord sounds more unified (Example 1).[22] Listeners almost invariably pick the lydian collection, states Russell (1). He reasons that the major scale's fourth degree requires resolution to its third degree, expressing music's horizontal component. The lydian scale's raised fourth degree, in contrast, reinforces the harmony and hence does not suggest progression. The lydian collection therefore represents its tonic's fundamental vertical unity (15). I encourage readers to compare these chords to hear the quality that Russell indicates.[23]

Russell's second rationale stems from the harmonic series and the interval of a perfect fifth. He notes that the perfect fifth is the "strongest harmonic interval" in the harmonic series and that its lower tone sounds like a tonic—it possesses "tonical authority" (2–3). A stack of perfect fifths therefore creates a descending chain of tonical force where each tone yields its "authority" to the one below; for example, $F\sharp_5$ yields tonical authority to B_4, which yields to E_4, which yields to A_3, and so on. A series of six

21 Russell's text aligns the lydian scale with a tonic triad rather than a tonic octave. Wasserman corrects this statement to say that, in lessons, Russell would relate the tertian lydian order to its tonic.

22 Examples and adaptations from Russell ([1953] 2001) appearing in this article are used by permission of the George Russell Estate/Concept Publishing, ©2002, all rights reserved.

23 Readers may note that the raised fourth scale degree also resides in the "blues scale" (C–E♭–F–F♯–G–B♭–C, for example). Russell does not equate the raised fourth degree in the lydian scale with the blues. Rather, he sees it as an indicator of verticality and harmonic unity. The major scale's natural fourth degree represents music's horizontal components. He describes scales that contain both natural and raised fourth degrees, such as the blues scale and the whole-half diminished scale, as "hybrids" that can express either vertical or horizontal dimensions, depending on the context (46).



Example 1
George Russell's ([1953] 2001, 1, ex. i:1) comparison of vertical sonorities for C major (*left*) and C lydian (*right*).

perfect fifths generates the diatonic collection; arranging these tones so that the tonic of the lydian scale is at the bottom maximizes its tonical authority. Thus, F (not C) is the tonic of the most vertically unified expression of the all-white-key diatonic collection.[24]

Russell's term "principal chordmode" refers to the tertian harmonic arrangement of a collection that functions as a superset for other sets, such as the conventional chords in Western tonal music (20–21).[25] The C lydian principal chordmode, for example, contains the notes of a C lydian scale stacked in ascending thirds beginning on C and serves as a superset for what Russell calls "sub-principal" chords—namely, the C major triad, C major triad with an added major sixth, C major-seventh chord, C major-ninth chord, C major-seventh chord with a lowered fifth, and so on (23). The C lydian principal chordmode symbiotically generates these subsets *and* represents their complete, unified expression.

Modes two, six, and four of the lydian principal chordmode/scale account for other common chord types.[26] As mentioned, mode one generates major triads, major-seventh chords, and so on. Mode two of the lydian chordmode generates dominant seventh chords. Russell prefers simply to use "seventh" rather than "dominant" for two related reasons. First, "dominant" indexes the fifth degree of the major scale and thus does not reflect this chord's preferred basis on the second degree of the lydian scale according to The Concept (24). Second, Russell regarded the dominant chord's drive toward resolution in the context of the major scale as a reflection of Western society's

24 Russell's invocation of the harmonic series mirrors similar moves by theorists such as Heinrich Schenker ([1906] 1954, 26–30, exx. 19 and 20; [1925] 2014, 112; [1935] 1979, 10, fig. 2) and Paul Hindemith ([1937] 1945, 17–24). Despite Russell's focus on descending fifths, he also makes no mention of Hugo Riemann's famous use of the descending fifth as the foundation of the minor triad. See Snyder (1980) for a detailed exegesis of various derivations of the minor triad in Western music theory.

25 "Principal chordmode" replaces "scale" in Russell's text because the latter implies a linearity that conflicts with his emphasis on verticality.

26 I use "mode" in this article to refer to rotations of the principal scalar set (e.g., mode two of the C lydian principal chordmode begins on D, mode four begins on F♯, mode six begins on A, and so on).

obsession with progress and production and inattention to the present, a tendency that connects to colonialism, capitalism, and destruction. Unchecked emphasis on progress inhibits freedom, for Russell, resulting in mediocrity and violence (214). Russell's rejection of "dominant" thus also reflects a desire to redress Western music theory's and Western society's emphasis on goal-directed progression and repression of greater awareness, exploration, and appreciation of the moment.[27] Thus, a "C seventh" chord comprises C–E–G–B♭, for example. I adopt this nomenclature throughout this article. Mode six generates minor triads and minor sevenths (25); mode four—built on lydian's raised fourth scale degree—generates diminished triads and half-diminished seventh chords (27). These chords, Russell states, receive their most unified vertical representation in a mode of the lydian principal chordmode (28).

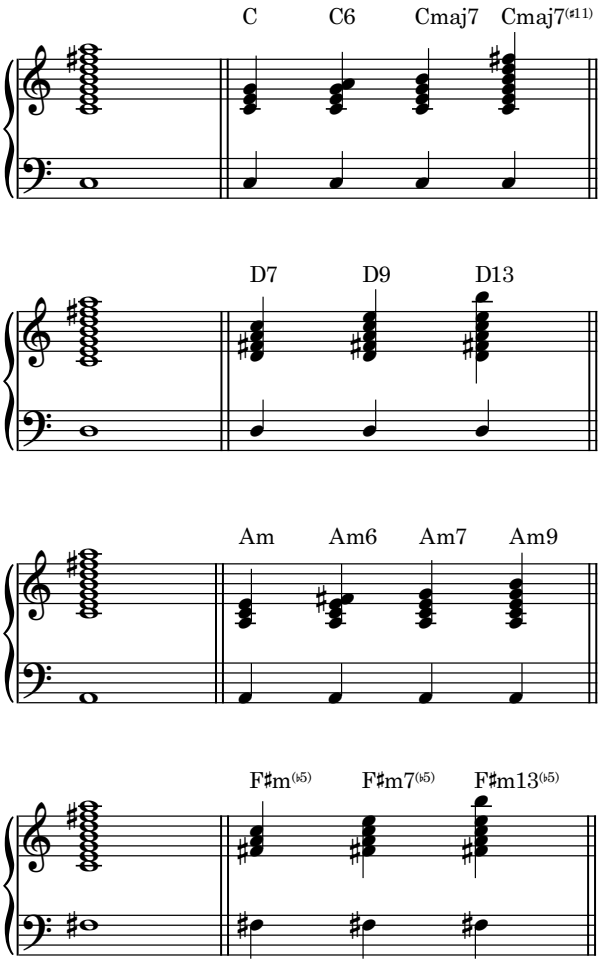
This group of associations between chords and modes—major with mode one, seventh with mode two, minor with mode six, and diminished with mode four—constitutes what Russell calls primary modal genre (PMG; 29–30). The remaining modes—three, five, and seven—of the lydian chordmode/scale can represent either inversions of chords built on the tonic or chords in their own right. This ambiguity between expressing an inversion of the tonic chord and functioning as chordal roots places them in the category of secondary modal genre (SMG), which is subsidiary to PMG. This article focuses on PMG, reserving a more detailed discussion of this distinction for future work.

Wasserman offers an exercise, adapted from Russell's book, that elucidates these PMG relations. Playing the C lydian principal chordmode in the middle of the piano and placing a C in the bass expresses the unity of a C major triad and major-seventh chord. Maintaining this principal chordmode but changing the bass to D—creating mode two—represents the complete, unified sonority of a D seventh chord. Substituting A in the bass similarly expresses an A minor triad and minor-seventh chord; substituting F♯ in the bass expresses an F♯ diminished triad and half-diminished seventh chord. Example 2 shows this procedure.[28]

Relating each of these four primary chord types—major, seventh, minor, and diminished—to a lydian collection produces a general method of deriving the most ingoing, unified superset for these chord types according to PMG. Russell delineates between the root of the lydian-based superset—the "lydian tonic" (C in all of the above cases)—and the root of the chord—the "modal tonic" (C, D, A, and F♯ above). Thus, the lydian tonic and modal tonic are identical for major chords. For seventh chords,

27 These music-theoretical and sociopolitical concerns are inexorably linked in Russell's theory, according to Wasserman.

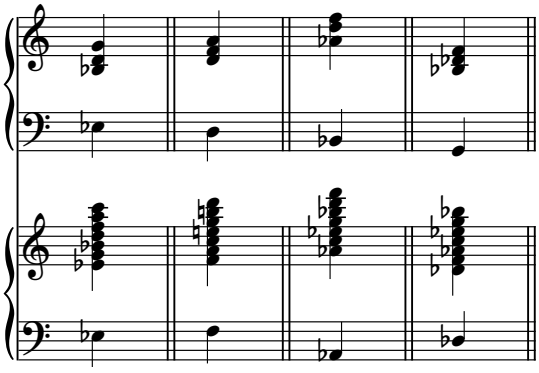
28 See also Russell's examples iii:3, 4, 5, and 7 ([1953] 2001, 23–27).



Example 2
Primary modes of the C lydian principal chordmode, synthesized from George Russell ([1953] 2001, 23–27, exx. iii:3, 4, 5, and 7).

the lydian tonic is a whole step lower than the modal tonic. The lydian tonic of minor chords is three semitones above the modal tonic. Finally, a tritone separates the lydian and modal tonics for diminished triads and half-diminished seventh chords.

Example 3 shows some specific examples of these relations. Chords appear on the upper system while lydian tonics and principal chordmodes appear in the lower system. Reading from left to right, this example shows that the center of tonal gravity (or lydian tonic) for an E♭ major-seventh chord is E♭ and its principal chordmode is E♭ lydian; the



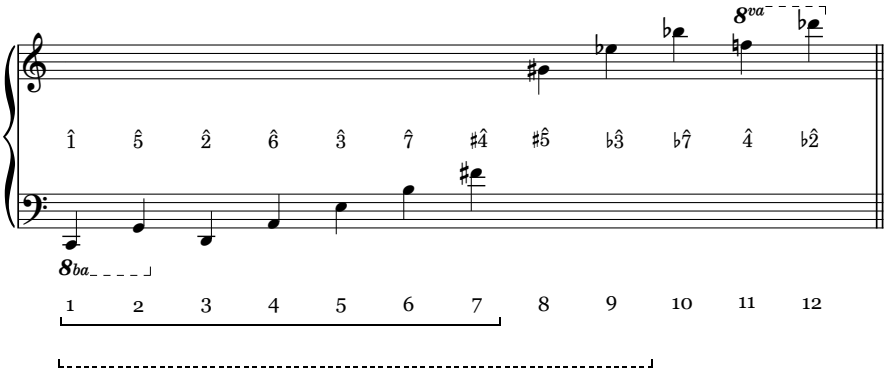
Example 3
Example conversions of chords to lydian tonics and chordmodes.

lydian tonic for a D minor triad is F and its principal chordmode is F lydian; the lydian tonic for an B♭7 chord is A♭ and its principal chordmode is A♭ lydian; and the lydian tonic for a G half-diminished seventh chord is D♭ and its principal chordmode is D♭ lydian. These examples illustrate the process of locating the lydian tonic and principal chordmode for common chords using PMG.

The lydian principal chordmode represents the most ingoing field of pitch relations, but not every chord subsists within it. The augmented triad, for example, requires a raised fifth that cannot be derived from any mode of the lydian collection. Russell outlines the "lydian chromatic scale," which he also refers to as the "Western order of tonal gravity," to generate and account for additional chords and furnish the complete ingoing-to-outgoing field of pitch relations in relation to a given lydian tonic (14).

Example 4 shows the C lydian chromatic scale. Numbers between the staves represent scale degrees and numbers below show their order of derivation. The leftmost pitch is the lydian tonic. The first seven tones of the lydian chromatic scale constitute the lydian collection arranged in ascending perfect fifths (14–15), indicated by a solid bracket at the bottom of Example 4. Travelling further to the right along the lydian chromatic scale introduces increasingly outgoing degrees. Russell adds the raised fifth scale degree next, breaking the pattern of ascending perfect fifths. Placing the raised fifth closer to the "ingoing" side of the lydian chromatic scale reflects its common appearance as part of the augmented triad in tonal music (16).[29] The ninth member, the

29 Russell attends to musical genre and conventions as well as historical factors in the outline of his theory ([1953] 2001, 12). Wasserman also emphasized this point in our lessons as part of an answer as to why the raised fifth breaks the chain of ascending perfect fifths—Russell recognizes that the augmented triad is common in tonal music and therefore must be accounted for by the ingoing side of the lydian chromatic scale.



Example 4
George Russell's lydian chromatic order of tonal gravity, adapted and transposed to begin on C ([1953] 2001, 12–14, exx. ii:1 and 3).

raised second or lowered third degree (Russell largely ignores differences in enharmonic spelling throughout his theory), recommences the pattern of ascending perfect fifths. The raised fifth and raised second degrees belong to the "semi-ingoing" level. Russell further denotes the first nine tones as the "consonant nucleus" (15), indicated by a dashed bracket at the bottom of Example 4. Ascending perfect fifths continue for the tenth and eleventh tones, the lowered seventh and natural fourth respectively, which comprise the "semi-outgoing" level (15). The lowered second degree appears in the "outgoing" twelfth position. It occupies this position because of its harsh harmonic relation to the lydian tonic (and also because it was displaced by the raised fifth as the eighth tone in an otherwise continuous chain of ascending perfect fifths).

Tones beyond the first seven in the lydian chromatic scale can be substituted *or* added to the lydian collection to form principal chordmodes that represent vertical expressions of other sub-principal sets (151). Substituting the raised fifth for the natural fifth results in what Russell calls the lydian augmented collection (30; $\hat{1}$–$\hat{2}$–$\hat{3}$–♯$\hat{4}$–♯$\hat{5}$–$\hat{6}$–$\hat{7}$, for example). Mode one of this chordmode generates the augmented triad and major-seventh chord with a raised fifth (32). Mode two of the lydian augmented chordmode (D–E–F♯–G♯–A–B–C using a lydian tonic of C) generates a seventh chord with an added raised eleventh (33; D–F♯–A–C–G♯); the sixth mode encompasses a minor triad with a major seventh (34; A–C–E–G♯);" and the fourth mode encompasses a half-diminished seventh chord with an added natural ninth (F♯–A–C–E–G♯, for example).[30]

30 Russell does not cover the fourth mode of the lydian augmented scale in this section of the book, but Chart A—an insert that provides a comprehensive, abstracted representation of Russell's theory—lists the half-diminished seventh chord with an added natural ninth as a sub-principal set of this principal chordmode.

Importantly, the lydian chromatic scale avoids prescribing combinations of tones, providing that the fundamental sonority remains intact. Thus, although Russell posits a set of "principal scales" that span ingoing and outgoing levels and account for the majority of common chords in tonal music, the combinatorial nature of the lydian chromatic scale opens additional analytical doors.[31]

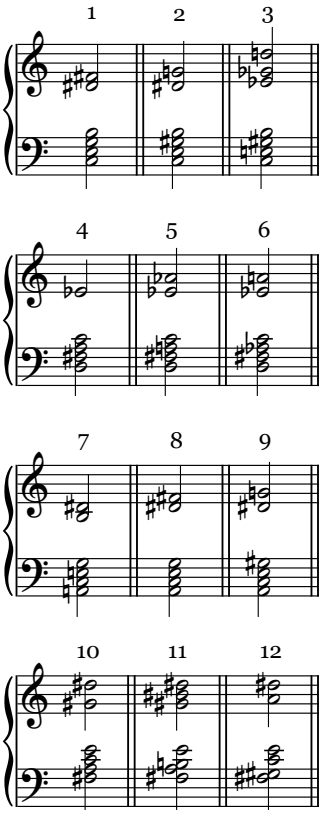
"Tonal order" indexes the level of "ingoing/outgoing-ness" for a given pitch collection and is determined by a collection's most outgoing pitch. Thus, any mode of the lydian scale corresponds to the seven-tone order; a collection that contains the raised fifth degree in relation to the lydian (not modal!) tonic, whether as a replacement for or in addition to the natural fifth, utilizes the eight-tone order; a raised second indicates the nine-tone order, and so on. Tracking tonal order is important in analysis because it helps position sonorities in the field of ingoing-to-outgoing pitch relations.

Example 5 shows twelve chords that utilize the nine-tone order of the C lydian chromatic scale according to PMG. The first three chords are variations of a major-seventh chord; hence, they possess identical modal and lydian tonics. Chords 4–6 are seventh chords, so the lydian tonic (C) is a whole step lower than the modal tonic (D). Chords 7–9 show various minor chords, so the lydian tonic (C) is a minor third above the modal tonic (A). Finally, chords 10–12 are various half-diminished chords, so the lydian tonic (C) is a tritone away from the modal tonic (F♯). These chords all belong to the nine-tone order because their most outgoing tone is the ninth one in the C lydian chromatic scale, or the raised second (D♯) in relation to the lydian tonic.

Two additional aspects of Russell's theory require summary before I present my analyses. First, preference is given to the most ingoing sonority given multiple options (132). The most ingoing (and thus preferred) expression of a diminished triad, for example, is as the fourth mode of the lydian chordmode. It could also emerge from the tonic of a nine-tone order lydian chromatic collection (such as $\hat{1}$–$\hat{2}$–$\flat\hat{3}$–$\sharp\hat{4}$–$\hat{5}$–$\hat{6}$–$\hat{7}$), but this set is more outgoing than the seven-tone lydian set and hence less preferred. Additional tones in a musical excerpt could delineate the lydian diminished (rather than lydian) collection, but the more ingoing set is given preference in their absence.[32] Second, Russell admits that some pitches function outside of any particular collection and

31 These principal scales progress from ingoing to outgoing: lydian, lydian augmented, lydian diminished ($\hat{1}$–$\hat{2}$–$\flat\hat{3}$–$\sharp\hat{4}$–$\hat{5}$–$\hat{6}$–$\hat{7}$), lydian flat seventh ($\hat{1}$–$\hat{2}$–$\hat{3}$–$\sharp\hat{4}$–$\hat{5}$–$\hat{6}$–$\flat\hat{7}$), auxiliary augmented (equivalent to the whole-tone scale), auxiliary diminished (equivalent to the whole-half diminished scale), and auxiliary diminished blues (equivalent to the half-whole diminished scale).

32 For example, a C diminished triad implies an F♯ lydian tonic according to PMG, but a concurrent melody of C–D–E♭–G–F♯ casts G as the twelfth tone of the F♯ lydian chromatic scale, a maximally outgoing interpretation. A C lydian tonic, in contrast, generates a more ingoing perspective: E♭ is the most outgoing tone and indicates the nine-tone order and hence is preferred.



Example 5
Examples of harmonies using the nine-tone order of the C lydian chromatic scale.

the spectrum of ingoing and outgoing relations as "chromatic enhancements," which correspond to chromatic neighbor tones (78). These designations occur more often in melodic and inner voices than for bass notes.[33] Distinguishing between chromatic enhancements and pitches that count toward the chordmode is ultimately up to the analyst.

Analyzing harmony

In this section I demonstrate the analytical utility of Russell's theory. I first examine single harmonies from various compositions before introducing Russell's notion of "linear application" to analyze longer musical excerpts. The Concept—particularly the consonant nucleus of the lydian chromatic scale—is especially useful

33 This point is not covered in Russell's text; Wasserman made this distinction in our lessons.

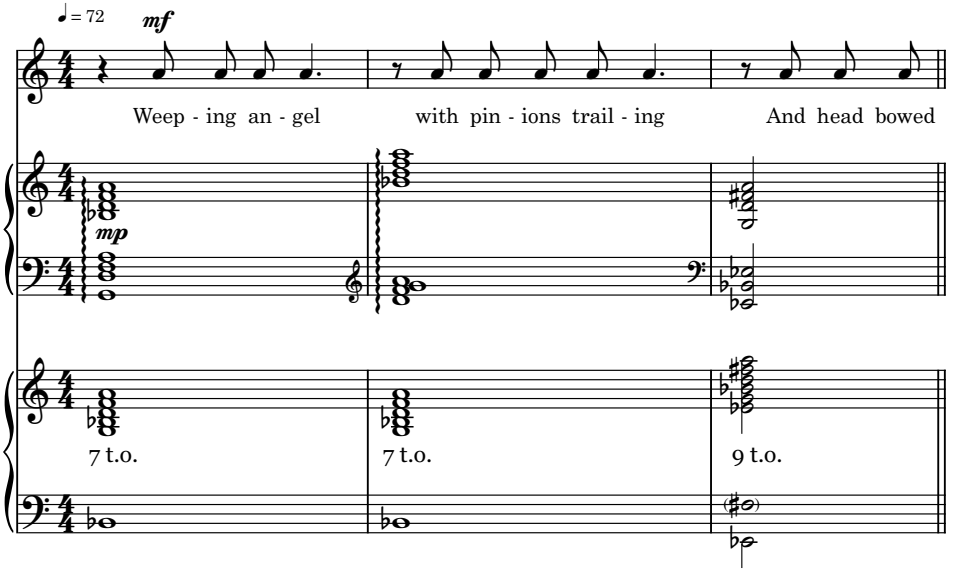
for analyzing harmonies that push at the boundaries of tonality because it eschews describing chromatic tones simply in terms of their linear progression toward diatonic ones. Rather, the lydian chromatic scale situates chromatic tones in a field of close-to-distant pitch relationships anchored by a lydian tonic. I analyze written compositions (rather than transcribed improvisations) to counter the common view that Russell's theory applies only to jazz. I also present a set of composers that expands beyond the purview usually found in music theory textbooks.[34] Thus, although the main focus of this work is Russell's theory, I also promote a more inclusive range of composers.

Example 6 shows mm. 1–3 of William Grant Still's song "Grief" (1953), with text by LeRoy V. Brant. In all of my analytical examples, the upper system(s) show the composer's score. The lowest system's upper staff (treble clef) shows a durationally equivalent harmonic reduction of the musical excerpt. Its lower staff (bass clef) shows the lydian tonic in the lower voice and the most outgoing pitch beyond the lydian collection, thus indexing tonal order, in the upper voice as a stemless notehead in parentheses (no upper voice indicates a seven-tone order for the given lydian tonic). The opening two measures of Example 6 express a G minor-seventh chord and use the B♭ seven-tone order. Still's harmony becomes semi-ingoing in m. 3, highlighting the angel's bowed head in Brant's text. The five lowest pitches in his harmony outline an E♭ major-seventh chord. The lydian tonic for this harmony is therefore E♭. The F♯$_4$ is a raised second scale degree and thus marks it as part of the nine-tone order. This description—a nine-tone, semi-ingoing collection with E♭ as the lydian tonic—reflects the sound of this chord to my ear, particularly its anchor to E♭, more than polychordal denominations such as $\frac{D}{E♭}$.[35]

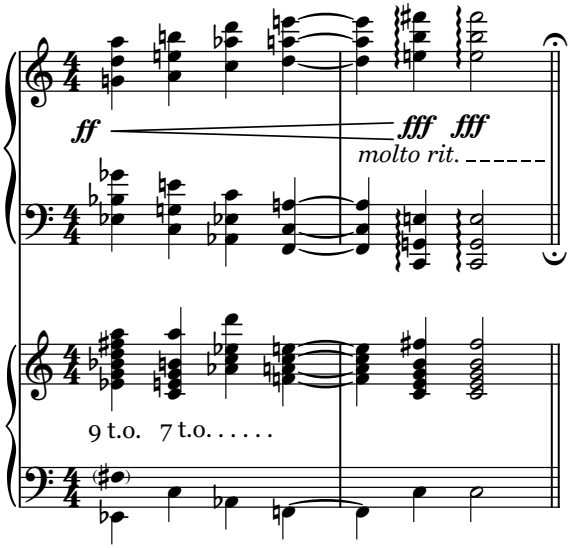
The final five chords of the first section of Marion Bauer's "Chromaticon" from *Four Piano Pieces*, op. 21 (1930), also combine ingoing and semi-ingoing collections. Example 7 reveals that all of these chords use the first mode of their respective chordmode. Chords 2–5 use the ingoing, seven-tone order. Bauer's first chord, however, jolts this passage into action by deploying the nine-tone order. This chord is an E♭ major-seventh chord with an added raised fourth (A) and raised second (F♯/G♭). Hearing the chord in this way positions E♭ as the lydian tonic and the left hand's G♭$_4$ as secondary to the right hand's G♮$_4$. My lydian-based interpretation of these chords emphasizes their tonal qualities, which provides a counterpoint to Hisama's set-class analysis (2001, 132).

34 For example, see D. Floyd (2017).

35 This chord symbol denotes a polychord that places a D major triad above an E♭ major triad.



Example 6
William Grant Still, "Grief," mm. 1–3, analysis showing lydian tonics and tonal orders.



Example 7
Marion Bauer, "Chromaticon," *Four Piano Pieces*, op. 21, no. 1, mm. 15–16,
a nine-tone order chord followed by seven-tone order chords.

Linear distributions of vertical tonal gravity

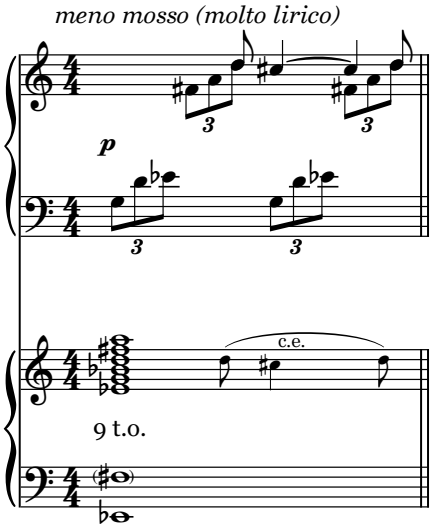
Russell expands his concept of vertical gravity later in his text to encompass instances where a single principal chordmode persists over longer periods. These "linearly distributed" instantiations help facilitate analyses of longer stretches of music ([1953] 2001, 197). Bauer linearly distributes the E♭ nine-tone order from Example 7 at the very beginning of her next section, m. 17, shown in Example 8. A vertical perspective would regard each of these beats as separate chords—E♭ major-seventh chords on beats 1 and 3 and D major triads on beats 2 and 4, all in first inversion—with individual lydian tonics (E♭ and D respectively). Regarding the entire measure as a linearly distributed vertical sonority, with the $C\sharp_5$ acting as a chromatic embellishment (shown with "c.e." in Example 8), reveals Bauer's subtle link between the end of the previous section and the beginning of the next one. This C♯ could also be regarded as the tenth tone in the E♭ lydian chromatic scale, indicating the ten-tone order rather than an embellishing tone. The analyst ultimately decides which interpretation seems most compelling.[36]

The piano introduction, mm. 1–2, of Howard Swanson's "A Death Song (Lullaby)" (1943), with text by Paul Laurence Dunbar, is shown in Example 9. This passage presents a linearly distributed nine-tone order of the C lydian chromatic scale. Unlike Bauer's example, Swanson's adds multiple left-hand chords from this superset. A purely vertical approach might regard the final chord in the piano's left hand as an A half-diminished seventh chord with a lydian tonic of E♭. A linear approach suggests that we hear these two measures as a linearly distributed C lydian chromatic nine-tone order, however.

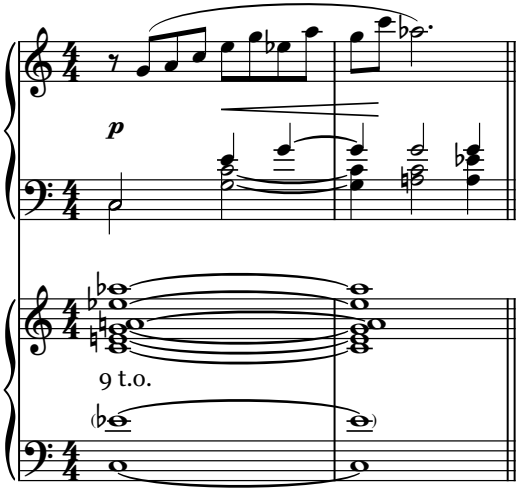
Russell's own analysis of a two-beat excerpt from J. S. Bach's Fugue no. 24 in B Minor from the first book of the *Well-Tempered Clavier*, BWV 869 (1722), demonstrates the unique perspective offered by vertical tonal gravity (Example 10). Western music theory would regard this moment as a D^7 chord adorned with upper neighbor tones (G–F♯, E–D, and E♭–D) and ascending passing tones (D–E–F♯ and F♯–G–A), but Russell suggests both "purely vertical" and linearly distributed interpretations. His purely vertical analysis names one chord per eighth note: G^{maj9}/D, D, $C^{\circ}/D^{7(\flat 9)}$, and D^7 (not shown in Example 10).[37] The main focus of his analysis, however, is that this entire excerpt can be regarded as an instance of the nine-tone order of the C lydian chromatic

36 This dual possibility reveals a finer distinction between vertical and horizontal orientations in Russell's theory that invites further scrutiny. Briefly, regarding this $C\sharp_5$ as an embellishment seems to rely on a slightly more horizontal mode of hearing because it implies attending to its imminent resolution to D_5, while hearing it as an indicator of the ten-tone order implies hearing it as part of the prevalent harmony (i.e., as purely vertical).

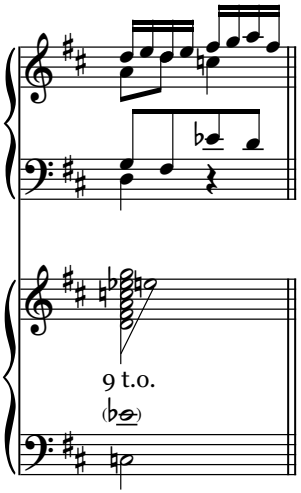
37 See Russell ([1953] 2001, 152, ex. vii:12).



Example 8
Marion Bauer, "Chromaticon," *Four Piano Pieces*, op. 21, no. 1, m. 17, as a "linearly distributed" nine-tone order of the E♭ lydian chromatic scale.



Example 9
Howard Swanson, "A Death Song (Lullaby)," mm. 1–2, as a "linearly distributed" nine-tone order of the C lydian chromatic scale.



Example 10
Analysis of J. S. Bach, Fugue no. 24 in B Minor, *Well-Tempered Clavier*, book 1, BWV 869, m. 45, beats 1–2, adapted from Russell ([1953] 2001, 152, ex. vii:12).

scale with D in the bass (E♭ is the most outgoing tone). Russell also analyzes the opening measures of Maurice Ravel's "Forlane" from *Le Tombeau de Couperin* (1917) as well as "Ondine" from Claude Debussy's *Préludes*, book 2 (1913). Future work will discuss these analyses, whose unique insights stem from vertical tonal gravity.

Margaret Bonds's beguiling "Dream Variation," the second song from *Three Dream Portraits* (1959), with text by Langston Hughes, features a passage that demonstrates how the linear component of Russell's theory can tell an analytical story over multiple measures.[38] Measures 21–23 of Bonds's song, shown in Example 11, begin with an F♯ minor triad that turns out to be the iii chord in D lydian rather than the vi chord in A lydian, as PMG suggests.[39] The octave D♮s at the end of this measure mitigate against A lydian, and the stressed melodic G♯ in the voice highlights D lydian's fourth scale degree. Similarly, the next measure begins with an A♯ minor triad, but the F♯s in this measure imply F♯ lydian as the appropriate principal chordmode rather than C♯ lydian, as suggested by PMG. The final measure of this excerpt synthesizes the pitch content of the previous two using the nine-tone order of the D lydian chromatic scale;

38 Russell does not explicitly propose this kind of analytical argument in his text; this analysis represents my extension of his notion of linearly distributed harmonies.

39 The first two measures are clear examples of what Russell calls a "secondary modal genre." Secondary modal genres convert major, minor, seventh, augmented, and diminished chords to other lydian tonics. Summarizing Russell's many other chord categories and concepts remains outside the scope of this article and will be discussed in later work.

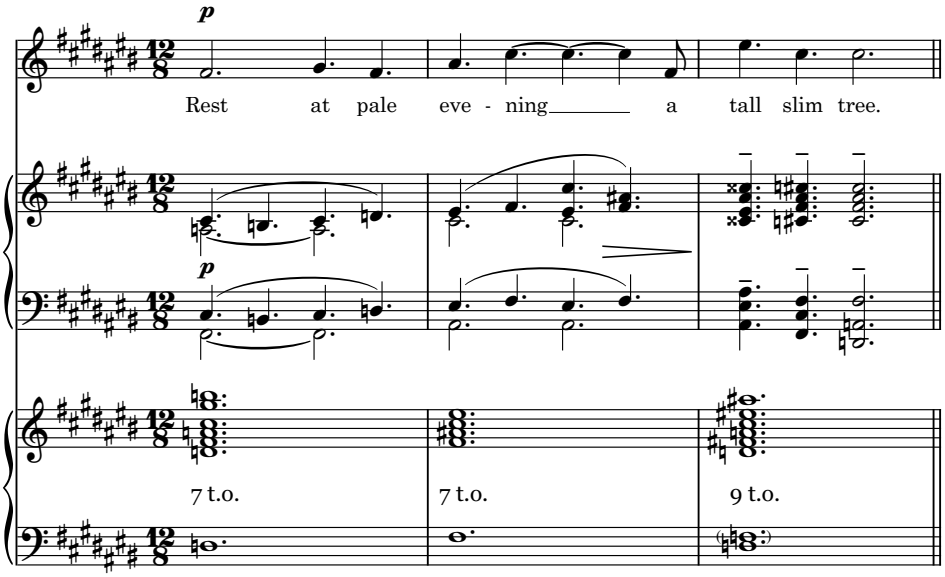
its A♯ and F♯ major triads, as well as its stunning D major-seventh chord that includes both the natural and raised fifth (A♮ and A♯), subsist within this set. Bonds's semi-ingoing harmony in m. 23 also contrasts with her ingoing harmonic setting of the same text earlier in the song (mm. 10–11, not shown), which uses the seven-tone F♯ lydian collection. Her conspicuous play between ingoing and semi-ingoing collections parallels the twin themes of hope and despair in Hughes's text.

Russell's nine-tone lydian chromatic order provides an interesting perspective on progressions from the hexatonic collection; that is, major and minor triads with roots separated by interval class four (ic 4). Specifically, my application of Russell's theory posits hearing these progressions as linearly distributed subsets of the nine-tone lydian chromatic scale. The first measure of Example 12 shows a C nine-tone order lydian chromatic chordmode—in this case, a C lydian scale supplemented by a raised second degree (D♯/E♭) and a raised fifth degree (G♯/A♭). The second measure contains its six subset consonant triads with roots separated by ic 4; register is used to emphasize their subset relation with the larger chordmode.[40]

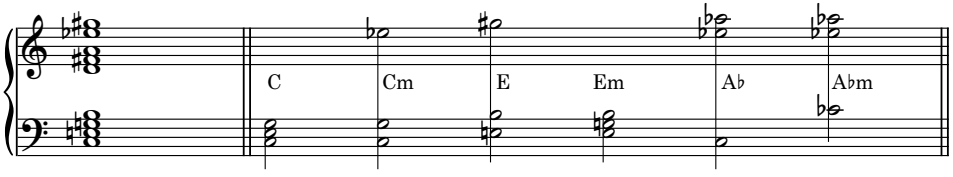
Russell's consonant nucleus complements other music-theoretical work on hexatonic progressions by anchoring these chordsets to a lydian tonic. One of Richard Cohn's examples of hexatonicism is the opening melody of Richard Strauss's *Salome* (1905). This melody, shown in Example 13, begins in the equivalent of C♯ major before arpeggiating an A minor triad in m. 6 (Cohn 2004, 306). Cohn eschews this melody's accompaniment to make an important theoretical point, which is that the tones of the A minor triad challenge the opening sound of C♯/D♭ major.[41] Either A–C–E congeals as a harmonic unit and is divorced from the surrounding major tonality, or each pitch functions as a chromatic neighbor to a member of the prevailing diatonic collection,

40 Although Russell does not discuss connections between the nine-tone order and hexatonic collections, I offer these examples to inspire further exploration and analysis. Interestingly, the nine-tone order of the C lydian chromatic scale contains three tones other than those required for C, Cm, E, Em, A♭, and A♭m triads; these three pitches (D, F♯, and A) form a D major triad. Conversely, any six-triad hexatonic set can become a nine-tone lydian chromatic scale by adding a major triad with a root that is a major second above or below any of the triads' roots. Thus, for C, Cm, E, Em, A♭, and A♭m triads, the nine-tone order of the C lydian chromatic scale emerges by adding a D major triad; the nine-tone order of the E lydian chromatic scale emerges by adding an F♯ major triad; and the nine-tone order of the A♭ lydian chromatic scale emerges by adding a B♭ major triad. These additional tones help anchor the hexatonic set to a lydian tonic. One of Richard Cohn's (2004, 296, ex. 8) early examples in his survey of "uncanny" hexatonic progressions highlights a progression from a G♭ major triad to a D minor triad at Scarpia's death in act 2 of Giacomo Puccini's *Tosca* (1900). Interestingly, an A♭ major triad joins the fray following this moment, suggesting a nine-tone lydian chromatic scale with G♭ as the lydian tonic. In his survey of ic 4 progressions in popular music, David L. Forrest includes Soundgarden's "Blow Up the Outside World," which oscillates between E major and C major triads before progressing to an E major-seventh chord and then a D major triad (Forrest 2017, para. 12, ex. 11). These final two chords expand the hexatonic collection for the opening progression to form the nine-tone C lydian chromatic scale.

41 The chordal accompaniment supports the melodic A minor arpeggiation with a D^7 chord.



Example 11
Margaret Bonds, "Dream Variation," *Three Dream Portraits*, no. 2, mm. 21–23.

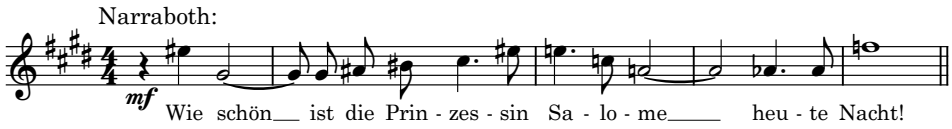


Example 12
Major and minor triadic subsets of the C nine-tone order lydian chromatic chordmode related by ic 4.

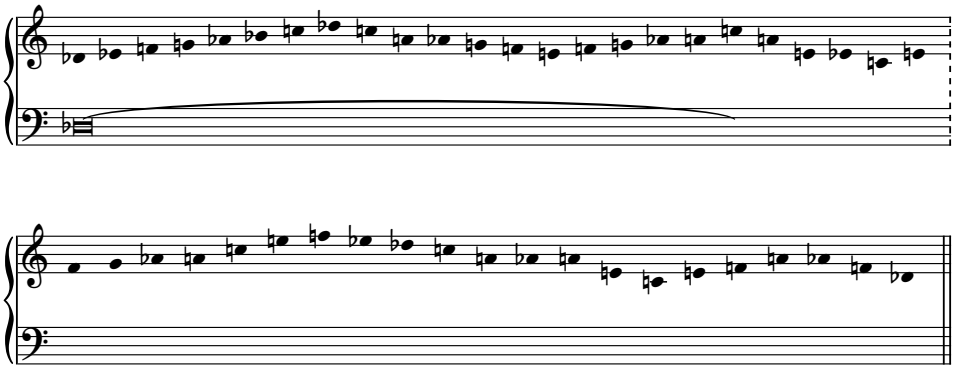
which sacrifices the integrity of the A minor triad (306). The C♯/D♭ diatonic collection and A minor triad function in this view as distinct, unassailable gestalts.

Russell's approach, in contrast, suggests that we hear this melody as the nine-tone order of the C♯/D♭ lydian chromatic scale. I submit the ear-training exercise in Example 14 to help readers hear these measures in this way.[42] Readers should slowly and deliberately sing the pitches on the upper stave over a D♭ drone. This melody begins by emphasizing D♭ lydian and gradually introduces—and eventually accentuates—the pitches of the A minor triad. Readers should also improvise with these pitches until the

42 This exercise is inspired by David Lewin's example 3.17 in his analysis of Anton Webern's *Five Pieces for Orchestra*, op. 10, no. 4 (Lewin [1993] 2007, 83–84).



Example 13
Richard Strauss, *Salome*, op. 54, mm. 4–8 (voice part only).

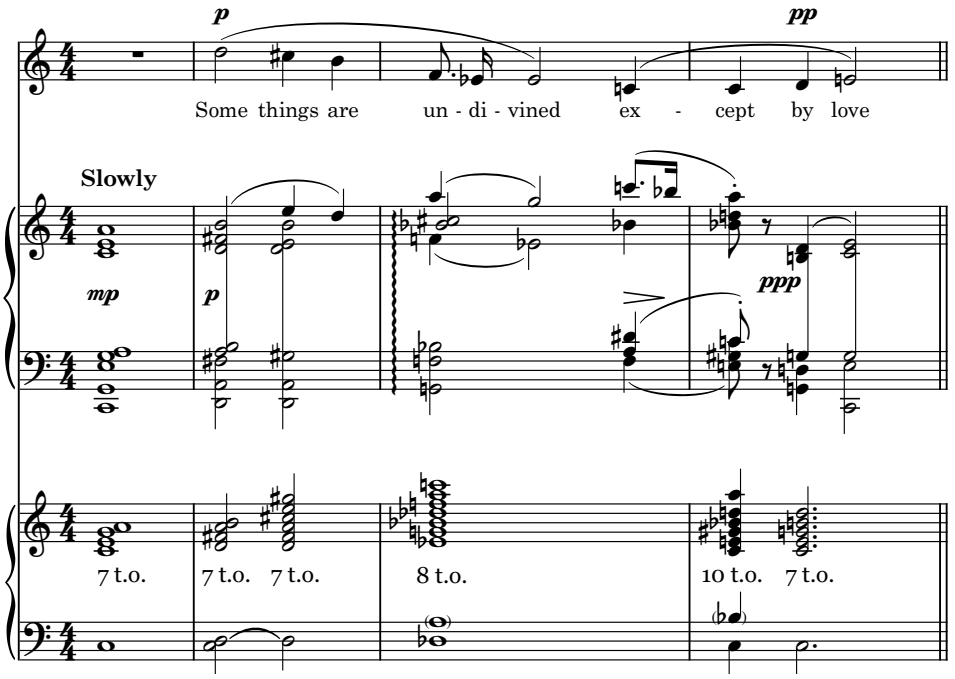


Example 14
An ear-training exercise for *Salome*.

A, C, and E sound as though they congeal as part of the larger collection, which should facilitate similar apprehension of the passage from *Salome*.

My final analysis extends Russell's notion of linear application to explore the interplay between vertical tonal gravity and harmonic progression. The *Lydian Chromatic Concept of Tonal Organization* mentions tracking lydian tonics around the circle of fifths as a way of analyzing longer musical excerpts. Russell also distinguishes between clockwise and counterclockwise movement around the circle of fifths, describing ascending fifths as moving in the "sharp direction" and descending fifths as moving in the "flat direction" ([1953] 2001, 218–19). Importantly, moving in a sharp direction dissolves the sound of the preceding lydian tonic because that pitch is chromatically replaced in the new collection; moving from C lydian to G lydian introduces a C♯, which erases the sound of C♮ as the lydian tonic. Shifting in a flat direction, in contrast, creates greater continuity between keys.

I introduce numerical nomenclature to track lydian tonics. Zero indicates the primary lydian tonic for a passage. Positive integers represent ascending fifths (movement in the sharp direction) and negative integers represent descending fifths (the flat direction) in relation to the primary lydian tonic. Thus, a series of lydian tonics ⟨C, F, C, D, E♭, C⟩, where C is the primary one, equates to ⟨0, –1, 0, +2, –3, 0⟩. These



Example 15
Charles Ives, "At Sea," *114 Songs*, no. 4, mm. 1–4.

numbers provide a sense of the movement of lydian tonics around the cycle of fifths, as well as denote direction, distance, and range.

Example 15 shows mm. 1–4 of Charles Ives's song "At Sea" (1921), with text by Robert Underwood Johnson. The opening piano chord is a C major triad with an added sixth, which PMG converts to C lydian. The next measure contains a beautifully subtle shift in the sharp direction, just as the text introduces "undivined things." The target, which arrives explicitly on beat three of m. 2, is D lydian, two steps in the sharp direction from the opening C (+2). Ives delays introducing the C♯ and G♯ that distinguish D lydian from C lydian until beat three, however. The D^6 chord on beat one of m. 2 thus functions as a kind of pivot chord, as both II in C lydian and I in D lydian. Measure 2 of my analysis indicates this dual function with a C/D dyad notated on the lower voice of the lowest stave.[43] The vocalist strikingly introduces the $C\sharp_5$ on beat three, which both dissolves the sound of C lydian and creates the bright shift that Russell associates with sharp-directed movements.

43 These analytical observations are mine; Russell does not mention pivot chords in his text.

Measure 3 begins with a G half-diminished seventh chord with an added natural ninth (A♮), before appoggiatura figures in the voice and the piano's right hand suggest an E♭^{9} chord in first inversion with a raised eleventh instead. The modal tonic's ambiguity mirrors the text's allusion to mysterious meanings. D♭ is the lydian tonic for both harmonic interpretations and the A♮ signifies its eight-tone order, obviating the need to decide on a definitive modal tonic. The chord on the last beat of m. 3 sounds to me like an F^{7} chord with an added natural fourth (B♭) when regarded purely vertically, which suggests E♭ lydian. A more linear perspective, however, implies that the preceding D♭ eight-tone order subsumes this F^{7} chord. This recalibration means hearing the F^{7} chord as a subset of the D♭ eight-tone order. Hence, this entire measure dramatically increases the distance between local and overarching lydian tonics on the circle of fifths (–5) as the tonal order increases by one.

Ives reserves the most outgoing chordmode of this excerpt for the beginning of the fourth measure, which ironically also returns to the central lydian tonic. The vocalist's C$_{4}$ helps me hear C as the lydian tonic for this complex harmony, whose B♭ indicates an extension to the ten-tone order of the lydian chromatic scale.[44] Thus, the most outgoing moment of this excerpt (semi-outgoing on the lydian chromatic scale) arrives as the text denotes love's singular insights. Finally, the G and C major triads that conclude this passage both use a linear deployment of the C seven-tone order. Ives avoids using a G seventh chord, thereby omitting the F that would mitigate against hearing these chords as subsets of C lydian.

In summary, Example 15 begins rooted in the lydian chordmode, pivoting from C to D lydian tonics ⟨0, +2⟩. The lydian tonic then shoots to the other side of the circle of fifths (–5) and also expands its tonal order by one. As the central lydian tonic returns (0), Ives expands the tonal order to the passage's most outgoing point before returning to the seven-tone order. Russell's theory reveals that the seven-tone order bookends the opening phrase of "At Sea," with more outgoing collections in the interim. This ingoing–semi-ingoing–semi-outgoing–ingoing progression mirrors Western music-theoretical narratives of consonance–dissonance–consonance. Russell's field of close-to-distant pitch relationships, however, offers a more nuanced tool for analyzing this progression.

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44 Other candidates for the lydian tonic for this harmony include G♯, E, B♭, and D. All of these options are less convincing to my ears, however. Lydian tonics of G♯ and E produce more outgoing interpretations: a lydian tonic of G♯ casts the A as the twelfth tone; a lydian tonic of E casts the A as the eleventh tone. Lydian tonics of B♭ and D are less attractive for other reasons. Both result in ten-tone orders: a B♭ lydian tonic makes G♯ the tenth tone; a D lydian tonic makes C the tenth tone. The deciding factor for me is the vocalist's C$_{4}$, which sounds so much like the first scale degree that I prefer C as the lydian tonic for this harmony.

Conclusion

Russell's *Lydian Chromatic Concept of Tonal Organization* includes analyses of music by Western art music composers J. S. Bach, Maurice Ravel, and Claude Debussy, as well as improvisers such as Coleman Hawkins, John Coltrane, Miles Davis, Eric Dolphy, Ran Blake, and others. Deborah Mawer, one of the few scholars who closely considers Russell's analyses of Western art music, somewhat dismissively suggests that they attest to "Ravel's continuing potency and relevance" for American jazz (Mawer 2014, 214). Russell comes under fire for filtering musical excerpts through his lydian lens, which Mawer (206) links to Harold Bloom's ([1973] 1997) notion of the "anxiety of influence." For Mawer, Russell's lydian orientation compensates for the "sheer weight of European musical tradition" by distorting the musical surface (202).

Mawer's evaluation suggests a complementary question: What would it take for Western music theory to buckle under the weight of Black music? Although Western music theorists sometimes acknowledge problems of applying theories developed for Western art music to other ("Othered") music, those analyses often proceed with the justification that they illuminate otherwise hidden musical facets. This general acceptance that such theories have something interesting to say about Black music while simultaneously ignoring or dismissing Russell's theory and others like it represents what Fanon calls a "systematized negation of the other" ([1961] 2004, 182). This imbalance serves as a synecdoche for the larger field of music theory, which features vastly more instances of Black music being dissected by theories embedded in whiteness than the reverse.

The *Lydian Chromatic Concept of Tonal Organization* is just one example of a much larger set of practices and ideas that comprise what I call fugitive music theory. My explications and explorations aim to elevate and foreground these music theorists and their work. Geri Allen, Fred Anderson, Anthony Braxton, Yusef Lateef, Undine Smith Moore, Roland Wiggins, Mary Lou Williams, and Olly Wilson, to name just a few, *are music theorists*, and their theoretical work should feature prominently in our discipline. Incorporating these theorists into our existing practices, however, is no "quick fix" for our discipline's relative monochromaticity.

Elevating the work of Russell and other fugitive music theorists in our field will require extensive recalibration. These theories mandate that scholars invest significant time and energy studying them. We must also remove barriers to learning and using them as part of undergraduate and graduate degrees. Relegating fugitive music theories to elective "special topics" courses rather than required ones casts them as outliers rather than a core part of our discipline. We should normalize Russell's theory as an accepted method of tonal analysis for major exams and other work. Fugitive music

theory also demands that we rewrite our field's history to include the contributions of Russell and others, as well as chronicle their historical exclusion from the field. Pedagogical practices must also change, arguably along the lines of Paula A. Grissom-Broughton's (2020) Black feminist musical pedagogy, which moves toward liberation through curricular reform and course design, teaching philosophy, and the consideration of music in sociocultural contexts.[45]

Attempting to normalize these theorists and theories as parts of our field without addressing music theory's systemic white supremacy is also wholly insufficient. The "fugitive" in fugitive music theory persists as a potential means of resisting and escaping assimilation into a field that refuses to address its systemic anti-Blackness. New hiring and promotion policies will be required as we expand who and what counts in music theory. Suffice it to say that the university's "possessive investment in whiteness," to borrow George Lipsitz's ([1998] 2018) term and Loren Kajikawa's (2019, 2021) adaption of it in relation to university music studies, presents significant barriers to this work. Fugitive music theory cannot be disassociated from these broader structural issues, which require radical reformation as part of the path to social justice and freedom.

45 See also Grissom-Broughton's essay in this volume.

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