(along with their adaption in the twentieth century), and ethnomusicologists exploring how the gamelan was embraced in North America, along with other related cultural hybrids, can profitably reference this book.

This is a comprehensive life-andworks biography that belongs in academic libraries. It is not hagiography. The reader learns of Harrison's destructive temper, his unhappy and unstable years in New York, and how he sometimes emotionally manipulated those who loved him. Alves and Campbell recount that Harrison's outstanding regret was how he treated people, and they share both the ups and downs of his life.

A reader of this book will note Harrison's boldness in investing himself completely in the art that interested him, without preoccupation with a career trajectory or getting ahead. His willingness to engage fully with ideas off the beaten path made him a catalyst in the development of twentiethcentury American music. For example, it was Harrison who shared *I Ching* with Cage, and Harrison's championing of Ives's Symphony no. 3 ("The Camp Meeting") led to Ives receiving the Pulitzer Prize for the work.

One might rightly conclude that Harrison (along with his mentor Cowell) offers an excellent example for musicians today of how they can benefit by approaching all music (whatever its provenance) openheartedly, to the ends of integration, synthesis, and, then, new creativity to share with others. As with other instances of rich and beautiful variety alive in the world, apparent to poets and composers alike, Harrison's works stand ready to inspire, now and into the future. Gerard Manley Hopkins was right:

All things counter, original, spáre, strange;

- Whatever is fickle, frecklèd (who knows how?)
- With swíft, slów; sweet, sóur; adázzle, dím;

He fathers-forth whose beauty is pást change: Praíse hím. (Hopkins, "Pied Beauty," stanza 2)

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Metamorphosis in Music: The Compositions of György Ligeti in the 1950s and 1960s. By Benjamin R. Levy. Oxford: Oxford University Press, 2017. [x, 292 p. ISBN 9780199381999 (hardcover), \$74; ISBN 9780199392019 (Oxford Scholarly Online), ISBN 9780199392002 (updf), ISBN 9780190857394 (e-book), prices vary.] Illustrations, music examples, bibliography, index.

Long a devotee of György Ligeti's compositional theories, aesthetics, and practices, Benjamin Levy has published a book that tells the story of the composer's development up to about 1970. What makes Levy's efforts stand out is his detailed and comprehensive study of Ligeti's sketches. By arranging the composer's works chronologically, Levy narrates the evolution—or, as he puts it, "stylistic transformation" (p. 6)—of Ligeti's compositional techniques from his student days in Hungary to the full flourishing of his career as an internationally recognized artist.

Levy argues for the necessity of studying Ligeti's sketches, because the theoretical systems he employed are complex and cannot be entirely appreciated or understood in isolation. During many visits to the Paul Sacher Foundation in Switzerland, Levy consulted a trove of information pertinent to his subject and had access to additional sketches that have only recently been made available. Ligeti was secretive about his working methods, making this approach even more important. Along with his encyclopedic knowledge of the published literature-in English, Hungarian, and German—Levy inspires a high level of confidence throughout. The few problems that surface with this book do not have anything to do with accuracy or diligence but rather with a lack of context, as we shall see.

In his early Hungarian years, Ligeti had to cope with increasingly difficult conditions as a composer. The official musician's union approved all music for public performance, and these decisions were made arbitrarily. In this period, Ligeti faced further difficulty working in the shadow of Béla Bartók, a much-revered composer whose more radical compositions symbolized a spirit of dissent for Ligeti's young comrades. Even though Ligeti's early compositions, such as Musica ricercata and the String Quartet no. 1, owe some of their technical and expressive techniques to Bartók and Alban Berg, Levy points out many novel elements that contain seeds of Ligeti's later style. For example, Ligeti derived material from folk sources, hybridized sonata form with "arch" form (p. 24), and evoked "nocturnal" topics; yet, these approaches never seem so overtly imitative that they are overly derivative. Levy persuasively argues that Ligeti's early techniques of interval expansion, his complex developmental procedures, and his individual reaction to Schoenberg's twelvetone technique via Hanns Jelinek's book are all remarkable for so young a composer (Hanns Jelinek, Anleitung zur Zwölftonkomposition, 2 vols. [Vienna: Universal Edition, 1952–58]).

Given Ligeti's losing battle against the Hungarian censors, the tantalizing tidbits of leaked information he received from the West, and the composer's correspondence with Karlheinz Stockhausen, his legendary 1956 flight across the border now seems inevitable. After stopping briefly in Vienna, Ligeti made Cologne his new home. Stockhausen himself put him up for several months until he worked out a more permanent living situation. In such a richly stimulating environment, it took

only a few months for Ligeti to absorb a staggering amount of new information in his new home. This is clear from his first piece in the West: Glissandi (1957). Levy argues that the piece—for all its shortcomings—provides important context for the composer's later development. Ligeti quickly withdrew this electronic "finger exercise" (p. 52), releasing it only in 1976 when his career was secure. Levy explains that the second half contains the exact same material as the first half, combined with its retrograde; but in an interesting twist, a large amount of sound is filtered out, making the texture less dense in the second half (p. 60). In Stockhausen's Gesang der Jünglinge, completed only a year earlier, part D of the structure is an exact retrograde of three tracks from part B, with a few added elements (Pascal Decroupet and Elena Ungeheuer, "Through the Sensory Looking-Glass: The Aesthetic and Serial Foundations of Gesang der Jünglinge," trans. Jerome Kohl, Perspectives of New Music 36, no. 1 [Winter 1998]: 116). Moreover, Stockhausen was also thinking in terms of windowing and filling in structural gaps; in the case of *Gesang*, he used impulse structures in sections B and D to thicken the texture (Decroupet and Ungeheur, 133). Although these associations do not take away from Ligeti's impressive early achievement, they may help explain why the composer thought of Glissandi more as a student work. They also suggest a stronger relationship between the two composers' methods than Levy acknowledges.

Although Ligeti developed a more personal compositional language in his next pieces, they still bear strong signs of influence by (or reaction to) Stockhausen, Pierre Boulez, and Cage—signs that too often go unacknowledged in Levy's writing. In *Apparitions* (1958–59), Ligeti's approach to rhythm utilizes a more free, "statistical" serial method, resulting in an "underlying framework

rather than a strictly deterministic ordering of a set of note values" (p. 99). Likewise, Ligeti's composition of dynamics adheres to a statistical serial idea instead of strict ordering. As Jerome Kohl abundantly documents in his recent book on Zeitmasse, Stockhausen's move toward statistical serial methods in 1957-58 were highly influential; yet nowhere does Levy acknowledge this pathbreaking composition (Jerome Kohl, Karlheinz Stockhausen: Zeitmaße [Abingdon, Oxon: Routledge, 2017]). Kohl adroitly points out that Ligeti's own description of his methods in Artikulation (1958) could "almost be a description of Zeitmaße's Part Two" (Kohl, 140–41). Another gap in context occurs in Levy's analysis of *Bewegungsfarbe* (fluctuating Ligeti's color) textures (p. 87). This techniquein which notes occur so rapidly that they bleed over the perceptual threshold between individual notes to harmonic effects-also operates in the extremely rapid passages of Zeitmasse. Finally, Ligeti's practice of dividing large beats into multiple subdivisions loosely corresponds to Stockhausen's rhythmic formants in Gruppen (1955-57). Ligeti could not possibly have been unaware of these innovations, given his close association with the periodical Die *Reihe* and the Darmstadt school at this time.

With the great success of Atmospheres (1961), Ligeti gained increasing notoriety, particularly after his brilliantly scandalous silent lecture at the European Forum for composers in Austria in 1961. Ligeti's follow-up pieces—the novel and appealing vocal chamber pieces Adventures (1962) and Nouvelles Adventures (1962–65)—have survived the test of time, for they include many tantalizing structural refinements as well as witty and absurd effects that continue to spark the imagination. Particularly revealing is Levy's astute analysis of Ligeti's regulation of the emotional categories in these pieces, for which he provides fascinating documentation from the surviving sketch material. Ligeti's ordering of emotional content in these pieces provides more evidence of innovative adaptations of serial techniques. Once again, however, Levy fails to acknowledge the tantalizing connections between Stockhausen's idea of moment form and Ligeti's implementation of episodic formal structure in *Adventures* and *Nouvelles Adventures*.

Although many roots of his style can be traced to other composers, Ligeti was truly a pathbreaking artist in many ways. Probably his most important independent contribution was his flexible technique of micropolyphony. Throughout the book, Levy sheds considerable light on this, from its humble beginnings in *Apparitions* to the full flowering in complex canonical structures in the *Chamber Concerto* (1969–70) and Ramifications (1968-69). Levy emphasizes that unlike Stockhausen, Ligeti felt free to develop quite independent approaches to handling rhythm and pitch. As detailed in his polemical article in Die Reihe, Ligeti argued for the interpenetration of methods as an antidote to the "leveling-out" that occurs when formal elements are undifferentiated: "The total form is serially guided, but the individual moments are, within given limits, left to the composer's discretion" (György Ligeti, "Metamorphoses of Musical Form," trans. Cornelius Cardew, Die Reihe [English-language edition] 7 [1965]: 11). In this way, a plurality of approaches unites towards a common, expressive goal. For Ligeti, technical purity was, in and of itself, not necessarily the ultimate goal; rather, musical expression took center stage.

Ligeti's *Requiem* (1963–65) is undoubtedly one of the great expressions of his ability to create emotionally intense music without being beholden to methodological minutia. Levy again emphasizes Ligeti's methodical avoidance of systemization. In the *Requiem*, completion of aggregates is not so important as the shape and contour of the individual voices. Two recurring trichords (which Levy calls "signals") provide road markers throughout the piece, in distinction to the often featureless surface of pieces such as Boulez's Structures 1a. In order to increase dramatic effect, Ligeti did not strictly order vocal entrances, further overriding conventional ordering principles. Some vocal melodies stretch over multiple voices, augmenting their angularity and expressiveness. As Ligeti's first major commission, the Requiem stands out as a testament to his growing compositional skill and a masterly demonstration of how a piece informed by but not constrained through serial thinking can be both architecturally convincing and emotionally engaging. What emerges in the Requiem and its follow-up piece, Lux Aeterna (1966), is, in Levy's words, a flexible and expressive array of creative techniques that navigate the territory between perceived extremes of Cage's "reliance on chance" and Boulez's "decision and automatism" (pp. 199–200).

Up to the time of the *Requiem*, many of the milestones in Ligeti's development as a composer can be measured by his development of particular textures, often deployed rhetorically as blocks or as road markers. For example, there is the "hocket" section in Aventures (p. 152), the "Horloges Démoniaques" section in Nouvelles Aventures (p. 156), the sudden jump in a glissando from extremely high pitch to low in Atmospheres (p. 121), "incomprehensible drama" in the Cello Concerto (p. 209), and of course the aforementioned micropolyphony in many works. The next step in Ligeti's stylistic metamorphosis was to integrate these various techniques by writing more

transitional sections. These transitions take many forms: some are through a system of gradual changes in rhythmic modules or by utilizing common tones between sections (pp. 203-4). Ligeti's sketches show much concern over rates of change in this period. The roots of the technique, however, again lead back to Stockhausen. As is clear from the sketches of Kontakte (1958-60), Stockhausen devised serial matrices that determined Veränderungsgrade (degrees of alteration) (Richard Toop, Six Lectures from the Stockhausen Courses Kürten 2002 [Kürten: Stockhausen Verlag, 2005], 168–70). These "degrees of alteration" also play a part in the spatialization of the piece. Stockhausen's later process compositions from the 1960s—particularly Prozession (1967) and *Kurzwellen* (1968)—make transition an overt topic. While Ligeti's methods are different, his concern over regulating the rate of change in his music is the same. Of course, Ligeti's accomplishments are by no means diminished by what was in the air, but Levy's work would be stronger if he provided more context.

In his writing about the patternmechanico pieces-Continuum (1968) and *Coulée* (1969)—Levy makes many helpful observations. In these pieces, Ligeti problematizes the boundary between chords and arpeggios; perhaps the composer meant to rebuke serialists' penchant for isolating perceptual categories. Levy's system for determining "primary" and "secondary" shifts within harmony is quite useful for talking about these pieces in a more structured way. It is interesting to ponder the connection here to baroque bariolage-for example, Johann Sebastian Bach's Chaconne from the Partita no. 2 in D Minor for Violin (BWV 1004), which contains passages of two-, three-, and four-note chords which must be rapidly arpeggiated, creating an effect similar to Ligeti's much

later music. Once again, Ligeti found appealing ways to push forward without breaking the connection to the past.

Levy's concluding chapter deftly wraps up his study. He argues that the diverse techniques Ligeti employed were ultimately meant to guide listeners through musical form, providing ways to navigate structure audibly. To this day, the great appeal of Ligeti's music is partly due to its sensuality. It is actually possible to follow the form in this way. Not straitjacketed by dogmatic adherence to one compositional technique but instead reveling in diversity, Ligeti's music is ultimately greater than the sum of its parts. The general process Ligeti followed in his sketches-beginning by writing out descriptions in plain language, progressing to graphic representations, and concluding by determining particular notes, rhythms, and timbres-follows a predictable arc that prioritized formal concept and dramatic viability over technical purity. Levy's innovative

analyses are enriched by his sensitive work with the sketches, and his narrative of Ligeti's "stylistic metamorphosis" is more credible as a result of his work in the study room.

Though Levy's book has many strengths, his study would have been more dynamic if he had acknowledged some of the deeper influences in Ligeti's development. In particular, a more nuanced understanding of the evolution of serial techniques would have provided greater depth to this book. Despite this shortcoming, Levy's work provides countless insights into Ligeti's music, its aesthetics, and its mechanics. He has convinced this reviewer that Ligeti's sketches are essential in understanding Ligeti's compositional project. If Levy has plans to write a second book-on Ligeti's music after 1970-his efforts would be much welcomed and greatly appreciated.

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AESTHETICS, PHILOSOPHY, AND SOCIOLOGY

Beethoven & Freedom. By Daniel K L Chua. New York: Oxford University Press, 2017. [xi, 273 p. ISBN 9780199769322 (hardback), \$44.95; ISBN 9780199773077 (updf); ISBN 9780190657246 (e-book), price varies.] Music examples, illustrations, bibliography, index.

Ludwig van Beethoven was the first independent musical artist, beholden to neither church (like his idol, Wolfgang Amadeus Mozart) nor state (like his teacher, Joseph Haydn). He liberated music from the formal, generic, and aesthetic constraints of the late eighteenth century, and in doing so set the nineteenth century on a path of extraordinary, albeit often controversial, musical change. An unbroken string of personal hardships—an abusive father, several thwarted loves, and an ill-fated attempt at brokering a family through guardianship of his nephew-punctuated a biography set against the political upheavals of the

French Revolution, Napoleon I, and Clemens Wenzel Lothar Metternich's Vienna. Yet he persevered, even turning—as Richard Wagner famously argued in 1870—his debilitating deafness into a compositional asset. Indeed, Beethoven's life and work seem to return repeatedly to the idea of freedom, be it from tyranny, convention, or creative and physical barriers. In fact, his enduring position as classical music's most visible figure may well come from his ostensible ability to embody freedom in all its philosophical and practical complexities.

Rather than shy away from such complexities, Daniel K L Chua addresses