BEN JOHNSTON (b. 1926)

String Quartets Nos. 1, 5, and 10

The Kepler Quartet

80693-2

1. String Quartet No. 5 (1979) 13:43

String Quartet No. 10 (1995) 19:57

2. Brisk, intent 5:46
3. Solemn 3:34
4. Deliberate but as fast as possible 2:37
5. Sprightly, not too fast 7:53

String Quartet No. 1, “Nine Variations” (1959) 17:11

6. Variation 1: Clear and concentrated 2:44
7. Variation 2: Sharp :38
8. Variation 3: Still, spacious 3:24
9. Variation 4: Impetuous :52
10. Variation 5: Fluid, pulsating 2:41
11. Variation 6: Assertive 1:09
12. Variation 7: Rather ominous 1:52
13. Variation 8: Nervous, driving :55
14. Variation 9: Minute, atmospheric 2:42

Kepler Quartet: Sharan Leventhal, violin I; Eric Segnitz, violin II; Brek Renzelman, viola; Karl Lavine, cello

All compositions published by Smith Publications.

TT: 51:06
This disc, with premiere recordings of Ben Johnston’s first, fifth and tenth string quartets, presents his earliest and latest essays in the genre and one from roughly the middle of his output. The three pieces are highly different from one another in style, technique and expressive intent. A span of twenty years separates String Quartet No. 1, “Nine Variations” (1959) from String Quartet No. 5 (1979), and sixteen years separate that fifth quartet from String Quartet No. 10 (1995). We thus have a chance to explore the outer poles of Johnston’s quartet output and one magnificent, but practically unknown, work written nel mezzo del cammin. In these notes I will attempt to retrace the path between these three works, situating them in the context of Johnston’s output overall.

Although Johnston began composing during his high school years in Richmond, Virginia, music for string quartet does not feature among his surviving juvenilia. Nine Variations, written in his early thirties, is thus his first work for the medium. It marks the end of a decade—the 1950s—that saw him emerge from his student years and begin to establish his name as a professional composer, with a Concerto for Brass, a Concerto for Percussion, the ballets St. Joan (for Sybil Shearer) and Gambit (for Merce Cunningham), the cantata Night (to a text by Robinson Jeffers), the dance-opera Gertrude (on a play by Wilford Leach), and numerous smaller chamber works and songs to his credit. In these early pieces we can hear Johnston digesting and applying lessons learned from the three highly contrasting composers with whom he had, in various senses of the term, “studied”: Harry Partch, Darius Milhaud and John Cage. Musically he had not yet fully settled, however, and his music of the 1950s attempts various alliances between a neo-classical tonal idiom, elements of jazz, and atonal and serial techniques. A curious mixture of these worlds can be heard in the score for Gambit, premiered at the University of Illinois in March 1959 (recorded on New World 80432-2), music of charm and vitality but of an undeniable stylistic schizophrenia.

Nine Variations, completed in July 1959 and premiered on November 28 that year by the Walden Quartet at the Donnell Library in midtown Manhattan, marks a decisive step toward the world of the avant-garde. It manifests the most thoroughgoing use of serialism of any of Johnston’s works to that time. The technique was not new to him: during his Masters’ studies at the Cincinnati Conservatory of Music some ten years earlier he had taken a class in atonal counterpoint taught by Mary Leighton and had composed a serial Etude-Toccata for piano. By the late 1950s, serialism—particularly as used by Webern—was being aggressively affirmed by Johnston’s European contemporaries as the most progressive language for modern music, a technique that emphasized discipline and abstraction: it was a form of writing that did not look longingly back to a past that had been ravaged by the war. Even the septuagenarian Stravinsky, in the latter part of that decade, had shocked the musical world with his belated capitulation to a technique he had long opposed.

Johnston’s Nine Variations manifests his belief in the progressive nature of serialism and embraces it as a satisfying means of creating musical order. There is no theme per se: each of the work’s brief sections may be thought of as a transformation of an underlying idea that is never directly stated. The piece is an instance of what Schoenberg called “developing variation,” a technique by which “variation of the features of a basic unit produces all the thematic formulations which provide for fluency, contrasts, variety, logic and unity, on the one hand, and character, mood, expression, and every needed differentiation, on the other hand—thus elaborating the idea of the
The key central idea here is a twelve-note row, G# A G E D# A# D B C F F# C#, which is used in each of the nine movements in various forms: in variation 1, in prime form; in variation 2, in inversion; 3, in retrograde inversion; 4, in retrograde; 5, in both inversion and retrograde inversion; 6, reordered; 7, differently reordered; 8, prime; and in variation 9, in all of these forms together. Another idea, this time clearly audible, is the motivic use of two fragments from the row, often occurring at the beginnings of movements: the “head” motif, G# A G; and the “tail” motif C F F# C#, its pitches often combined dyadically into perfect fourths and fifths.

The nine movements alternate between slow and fast, or between calmness and energy, with the even-numbered variations (“Sharp,” “Impetuous,” “Assertive,” “Nervous, driving”) passing by with Webern-like rapidity. Indeed, much in the work, especially in the slower movements, recalls Webern: the short breath of the phrases, which often consist of only two or three notes; the constant fluctuations of texture and of dynamics; the poetic quality of the silences into which the sounds frequently dissolve. Against that, one might say that Nine Variations is on friendlier terms with consonance than much of Webern, and more partial to regular, danceable rhythms. There is, moreover, another important influence on the piece: John Cage, with whom Johnston (in New York that year, on sabbatical from his teaching post at the University of Illinois) was then studying. Cage looked at the manuscript and offered various suggestions which Johnston incorporated. Cage’s criticisms touched on the nature of the material (which “needed to be more pointillistic”), the form (the middle variation originally seemed “too short”) and the use of silence, which Cage felt was different than his own (although this latter point was an observation rather than a criticism). One can imagine Cage approving of the overall modernity of the piece without fully endorsing the somewhat received nature of the compositional methods used. In any event, the final score stands as one of the most satisfying of Johnston’s early compositions, and one of his relatively few straightforwardly serial works. And yet Nine Variations marks the end of a chapter in his development rather than a beginning. He used his sabbatical year in New York to take the first tentative steps in exploring an even more radical compositional approach than serialism, one that, in his own case, had been “on hold” for a decade: the use of pure, non-tempered tuning elaborated to microtonal lengths, a technique that, within a few years, he would be calling proportionality.

Johnston’s interest in acoustics and the scientific basis of musical pitch relationships dates back to a lecture he remembers hearing in his school days about the relationship of the music of Debussy to the theories of Helmholtz. But it was in 1949–50, immersed in his atonal counterpoint studies in Cincinnati, that a musicologist friend loaned him a copy of Harry Partch’s Genesis of a Music, just published by the University of Wisconsin Press. This opened the door for the twenty-three-year-old Johnston to the world of extended just intonation, and to its idiosyncratic application in Partch’s music and instrument design. Johnson became Partch’s “apprentice” in northern California for six months the following year, studying, playing and recording his music. However it would be nearly ten years before he felt ready to apply Partch’s tuning theories in his own work. The earliest fruits were his Thoreau cycle Five Fragments (New World 80432-2), the Shakespeare setting A Sea Dirge, the Sonata for Microtonal Piano, and String Quartet No. 2 (New World 80637-2), all from the early 1960s. These works are resolutely avant-garde in applying serial techniques to the expanded pitch vocabulary of extended just intonation—here extended enharmonically by

1 Arnold Schoenberg, Style and Idea (Berkeley: University of California Press, 1975), 397.
chains of perfect fifths and pure major thirds not compromised by temperament, so that for example the pitches Fx, G, and Abb, which would all be the same note on the equal-tempered piano, become intonationally and harmonically distinct. *String Quartet No. 2* (1964), the successor to *Nine Variations*, made clear to Johnston that the quartet medium was a highly promising one for the exploration of the new pitch worlds he had now begun to navigate. A third quartet followed in 1966 and a fourth in 1973 (both recorded on New World 80637-2). By the time he came to write *String Quartet No. 5* in 1979, considerable changes both aesthetic and technical had occurred in his music from the time of that first essay twenty years earlier.

The later 1960s had seen a gradual erosion of belief in some aspects of the post-war avant-garde. The ever-widening gap between the new music and its potential audience bothered Johnston greatly, not least in his role as chair of the music division of the Festival for Contemporary Art at the University of Illinois. In writings from these years he reflected at length on the question of intelligibility in music. By the beginning of the 1970s, and somewhat connected to a personal crisis that saw him embrace the Roman Catholic faith, he had become concerned to “humanize” his music and to find ways of composing uncompromisingly new things that nonetheless would speak more directly to the curious listener than the elegant but highly cerebral constructs he had produced in the early 1960s. Central to this quest was the technique of *proportionality*, the use of both pitch and rhythmic intervals that could be accurately measured by ear. By the time of the fourth quartet he was using harmonies that incorporated the interval of the just minor seventh (the ratio 7/4), and in the years ahead (beginning with the *Suite for Microtonal Piano* of 1978) he began, following the lead of Partch, to incorporate into his music highly unfamiliar intervals derived from the higher partials of the harmonic series. In a major theoretical article from 1976, “Rational Structure in Music,” Johnston lays out the theoretical underpinnings of these new melodic and harmonic resources.

*String Quartet No. 5* is one of Johnston’s most impressive achievements, music of radical innovation that speaks an expressive and engaging language with a visionary intensity reminiscent of Ives. It is a single-movement variation form based on “Lonesome Valley,” an old Appalachian traditional gospel song of unknown authorship. The theme is presented clearly at the outset of the work, albeit in a highly unconventional tuning (see Fig. 1), and in this sense the piece is a more straightforward example of variation form than *Nine Variations*; it is closer to *String Quartet No. 4*, a set of variations on the hymn “Amazing Grace,” but with less clear demarcations between the successive variations and an even more exploratory approach to microtonal harmony. “Its form resembles more the form of Debussy’s *L’Après-midi d’un Faune* [both being derived independently from the structure of the poem of the same title by the great French Symbolist poet Stéphane Mallarmé],” Johnston writes, “with successive ‘evocations’ each consisting of the same sequence of thematic ideas, but differently proportioned and developed each time. It is a single movement, but has sharply contrasting tempi and treatments of the basic material, which includes the folk hymn”.

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3 Ben Johnston, *Maximum Clarity and Other Writings on Music*, edited by Bob Gilmore (Urbana: University of Illinois Press, 2006), 203. In preparing the recording of the fifth quartet Johnston asked the members of the Kepler Quartet to familiarize themselves with the Stéphane Mallarmé poem on which Debussy’s work is based.
Figure 1: opening statement of the “Lonesome Valley” melody from String Quartet No. 5. The third degree of the pentatonic scale used (A₃) and the fifth degree (D₃) are derived from eleventh-partial relationships, approximately a quarter-tone lower than their uninflected equivalents in equal temperament. © Smith Publications.

In the course of the piece a number of statements of the “Lonesome Valley” melody are presented in different tunings, “in a meditation on its many possible emotional meanings.” 4 Johnston uses the full pitch resources of extended just intonation in tuning and harmonizing the melody, going as far as a 13-limit system that combines the intervals of conventional triadic harmony with intervals derived from the seventh, eleventh and thirteenth partials. Sometimes the tuning can be relatively “normal,” as for example in the viola’s statement of the tune at 5¹ 36" in this recording, which uses a Pythagorean tuning of pure fifths and fourths and wide thirds (set here, however, against a microtonal accompaniment). At other times the intonation patterns become highly complex, as in the viola’s restatement of the theme at 10¹ 14"; both this and the chords accompanying the violin 2 melody that follows offer a sustained example of 13-limit harmony. String Quartet No. 5 is in fact Johnston’s first fully achieved 13-limit work; the thirteenth partial forms with its fundamental a wide minor sixth, 841 cents, lending a distinctive harmonic identity to those chords in which it occurs. Whatever the numerological significance of the use of the thirteenth partial in a work based on a gospel song about death—the “valley” referred to is the valley of the shadow of death, an image from Psalm 23 in the Old Testament—this type of harmony lends the music a strange, uncanny quality impossible to achieve by other means.

The fifth quartet was written for the Concord Quartet, who never performed it; the premiere had to wait a few years, finally being given in 1983 by the Tremont Quartet as part of a Chicago retrospective concert of Johnston’s music. By then he had already written a sixth quartet and was about to begin a seventh. By the time he embarked on String Quartet No. 10 in 1995 his music had evolved yet again. Johnston’s use of extended just intonation was a way of revivifying tonal relations in music without lapsing into a nostalgic appropriation of idioms from an earlier era, which has always seemed to him a kind of escapism, and aesthetically negligible. He became interested in exploring a different question: how would the idioms of classical music have developed if freed from the constraints of equal-tempered tuning, and if they had used instead the expanded pitch world made possible by just intonation? Just as there is an intimate connection between a language and its vocabulary, so, Johnston hypothesized, the restricted pitch vocabulary of eighteenth- and nineteenth-century music had placed limits on the development of its language. The works that he began to produce from the mid-1980s onward pose this question in vibrant form, not as theoretical speculation but as actual works of music. As though to clarify the question, Johnston felt the need to focus primarily on matters of melody, harmony and rhythm. Listening to the tenth quartet, especially on first encounter, we may feel as though we have entered a parallel universe in which Haydn has become a microtonalist with a predilection for complex proportional rhythms. The whole history of Western music flashes before our eyes—almost literally so in the last movement—but with all the colors different: seasons, decades and centuries all tumble into one another.

4 Johnston, Maximum Clarity and Other Writings on Music, 84.
The opening movement of *String Quartet No. 10* is a textbook sonata structure, with an exposition (repeated), a development, and a recapitulation. The exposition presents two themes, the first in a microtonally extended G minor and the second in its relative major, B-flat; in the recapitulation both themes dutifully return in the tonic. This is eighteenth-century sonata form almost to the point of caricature. The materials, however, tell a different story. The opening music is gently polyrhythmic, with both the violin 1 melody and the cello bass line implying rhythms of 3, out of synch with each other, against accompanying patterns in the inner voices in a syncopated 4. The harmony is tonal but microtonally extended in a playful way, as though the notes “between the cracks” were making a bid for independence. The fugal slow movement that follows, while formally conventional, is an exercise in richly sonorous 13-limit harmony, more tonally oriented (in an extended D minor) than in the Fifth Quartet. Then comes a robust and joyful scherzo and trio, both with the customary A and B sections, but in a rhythmic language out of the world of Nancarrow: the four players are locked throughout in a rhythmic relationship in which the measure is simultaneously divided into 4 beats (violin 1), 5 beats (violin 2), 6 beats (viola) and 7 beats (cello); only on the downbeats do the players’ notes actually coincide. For the musicians this is certainly difficult but, as we hear here, not impossible; the dance-like nature of the music (a quality found in much of Johnston’s output) seems to propel the music along, with the barline serving as a kind of rhythmic anchor. The finale, as Johnston described it to the members of the Kepler Quartet (who premiered *String Quartet No. 10*), is a “sort of a music history essay, period-by-period.” The opening, in a lilting 6/8 metre, resembles a Renaissance dance tune complete with tabor accompaniment (the viola playing *col legno battuto*), but also suggests the quasi-antique style occasionally found in the music of Henry Cowell and Lou Harrison. A brief but elegant middle section in 4/4, beginning here at 4′ 37″, seems to move the music a century or two onward, while maintaining the translucent harmonic character of the movement’s opening (5-limit triadic just tuning, with an occasional 7-limit interval in passing). Then—to our astonished ears—the music segues into the mid-nineteenth-century traditional Irish song “Danny Boy,” in an extended harmonic world in which the 7th (and occasionally 11th and 13th) partial relationships evoke, somewhat incongruously, the harmonies of jazz. This reference is further emphasized by the walking bass line soon provided by the cello, allowing the music to—as Johnston’s generation would say—let its hair down. And yet the emergence of this tune, unexpected as it is, has a rational explanation: the whole movement has in fact been a set of variations on it, with the opening Renaissance-like theme being a strict inversion of the “Danny Boy” melody and the other material directly derived from it. This is a kind of hidden ingenuity of the kind found in serialism but also in medieval and Renaissance music; in the present context Johnston’s variations seem in the spirit of both of these and more. The sense of joyful abandon that the music finds as it progresses comes to an unexpected end. After the second time through the “Danny Boy” melody, the players come to rest, very quietly, on an open string—D in the case of violin 1, G for violin 2, C for viola and low C for cello. They sustain this while playing a glissando of harmonics with the left hand. The effect is striking: it is, in this context, as though the history of music has ended and all that is left is pure tone—tone with all its resonant properties, its inner, hidden, spectral structure, now fully audible.

That is the end of Johnston’s tenth quartet and, so far at least, of his remarkable cycle of string quartets. The work that now remains is of a different kind: to bring these hugely challenging works to life and to share the musical world—or rather worlds, plural—they inhabit. To this end the Kepler Quartet, in this second CD of their Johnston series, has worked again with the young composer and software designer Andy Stefik, who made exact MIDI realizations of the pieces as
a learning tool for the players. Also of crucial importance has been their work with Johnston himself who, having relocated to the Madison area, was able to provide a great deal of contact and coaching for the Quartet during the rehearsal and recording process: this was, violinist Eric Segnitz says, “very inspiring on a human level.” The compositional work on the quartets may now be complete, but the journey of the music is only beginning.

—Bob Gilmore, Amsterdam, October 2010

Bob Gilmore is a musicologist and keyboard player born in Northern Ireland and presently teaching at Brunel University in London. He is the author of Harry Partch: A Biography (Yale University Press, 1998), and the editor of Ben Johnston: Maximum Clarity and Other Writings on Music (University of Illinois Press, 2006), both of which were recipients of the ASCAP-Deems Taylor Award. He is founder and artistic director of Trio Scordatura, an Amsterdam-based ensemble performing music using alternative tuning systems.

Ben Johnston (born 1926) is an American composer whose works are built on the pure ratios of the overtone series. This mathematical base is sometimes overlaid with references to folk songs, hymnody, jazz and other vernacular musics to create organic soundscapes combined with humor, wit and humanity. The arc of Johnston’s musical career began in the 1930s. He started thinking about the physicality of sound which would lead him to Just Intonation as the tuning system of choice for most of his compositions. While the concept of just-tuned music led Johnston into composition, his early works of the 1950s use the familiar equal-tempered scale and evoke neoclassical balance and clarity. Johnston began composing with Just Intonation in the 1960s and his perspective became metaphysical as he grappled with opposing elements of chaos and order, randomness and total serialism. From the 1970s onward Johnston’s concern with the social impact of his music caused him to shift sonically from complexity to simplicity. As a result, his later works sound candid and tranquil while maintaining a highly complex underside. In the 1980s Johnston explored European classical music and pondered the path it might have taken if not limited by equal temperament. His ten string quartets, a monumental contribution to twentieth-century music, were completed in the 1990s.

His music awards include a Guggenheim Fellowship, a grant from the National Council on the Arts and the Humanities, two commissions from the Smithsonian Institution, and the Deems Taylor Award. In 2007, the American Academy of Arts and Letters honored Johnston for his lifetime of work. His Quintet for Groups won the SWR Sinfonieorchester prize at the 2008 Donaueschinger Musiktage. In the twenty-first century, Johnston continues to pursue the spiritual quest that connects his life to his art. He also continues to guide musicians through performances of his compositions in keeping with his belief that a musical work is not fully composed until it is performed well.
The Kepler Quartet was formed in response to the enthusiastic audience and critics’ reception of their world-premiere performance of Ben Johnston’s String Quartet No. 10 on the Present Music concert series on April 20, 2002. Violinists Sharan Leventhal and Eric Segnitz, violist Brek Renzelman and cellist Karl Lavine have since channeled their energies as a group almost exclusively into recording the string quartets of Mr. Johnston for New World Records in partnership with engineer Ric Probst. Volume 1 (String Quartets Nos. 2, 3, 4 and 9) was released in 2006. The Kepler Quartet has been fortunate to work closely with the composer in documenting these works, and wishes to salute Ben for his great insight, patience, and loyal friendship throughout this process, as well as for all the fantastic music, of course! For further information on individual quartet members, or to support the continuation of this project, please visit www.keplerquartet.com.

SELECTED DISCOGRAPHY


Carmilla. E.T.C. Company of La Mama. Vanguard VSD-79322. (LP)

Casta Bertram. Bertram Turetzky, contrabass; tape. Nonesuch H 71237. (LP)

Ci-git Satie. New Music Choral Ensemble, Kenneth Gaburo, conductor. Ars Nova/Ars Antiqua AN 1005. (LP)


SELECTED BIBLIOGRAPHY


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