NOTES ON THE PROGRAM

How can a single tone relate to the total work of art? This relationship of whole to part, theorized by Arnold Schoenberg as the Grundgestalt—in which a molecular musical idea becomes a scalable seed that is both motif and form—is arguably the central problem of 20th century music. When Schoenberg abandoned tonal harmony to synthesize his 12-tone system in the early 20th century, he intended for every pitch in his atonal compositions to carry equal prominence. But this egalitarian approach dogged his attempts to distill the essence of the structural conventions of the common practice. Lacking the traditional guideposts of harmonic tension and resolution, Schoenberg built a connection to the grand forms of the recent past using two-note intervals—the essential building blocks of serialism.

The academy soon seized on the serial composition techniques of Schoenberg and his Second Viennese School, and many mid-century composition students were thus exposed to atonality. Ben Johnston was one such until he flouted his conservatory training in the mid-1940s. He turned to an exploration of alternate tuning systems that divide the octave into ratios other than the evenly spaced, equal-tempered chromatic scale idolized by Western music since the 18th century. Johnston ultimately developed his own Grundgestalt, employing the proportions between the frequencies of his microtonal palette—itself derived from the naturally occurring overtone series—to govern the rhythmic and formal structures of his works.

A few decades after Johnston's discoveries, and across the Atlantic, Tristan Murail and his contemporaries at Paris's IRCAM sound research institute used the overtone series in a different way, seeking to describe acoustic spaces with computer-assisted spectral analysis. Though he explored some of the same ratio-focused tunings as Johnston, Murail developed his version of Grundgestalt holding in mind the belief that music "merely entails a parade of distortions: from the idea to the eventual form; from the form to the score; from the score to the performance; from the performance to the ear."

Alexandra du Bois, an established millennial composer equally at home in the city and the forest, wrote *Heron. Rain. Blossom.* as a representation of natural space. Engaging with "sound as voice, breathe, and feeling," du Bois draws on Zen Buddhist philosophy and poetry to plumb the depths of each instrumentalist's exhalation. Both Murail and du Bois weave a quasi-linear tapestry in pursuit of a sonic environment, rather than carry the listener inexorably from open to close.

Trio for Strings, Op. 45

Arnold Schoenberg Born September 13, 1874 in Vienna. Died July 13, 1951 in Los Angeles.

Composed in 1946. Premiered on May 1, 1947 in Cambridge, Massachusetts by members of the Walden String Quartet.

First CMS performance on June 19, 1988 by violinist James Buswell, violist Walter Trampler, and cellist Fred Sherry.

Duration: 18 minutes

Arnold Schoenberg and his family were long settled into musical life in Los Angeles and their cozy house in Brentwood Park—not far from his plum UCLA professorship, and just across the street from Shirley Temple's house—when the composer began sketches in June of 1946 for a commission from Harvard University. The piece wasn't due until spring of the following year, destined for the Walden String Quartet's program at the Symposium for Music Criticism that would also feature the premieres of Walter Piston's Third String Quartet and Bohuslav Martinů's Sixth. On August 2, however, Schoenberg's life was interrupted by what he came to call "mein todesfall"—a nearly fatal heart attack that required an injection into his heart to revive him from a flatline condition.

While Schoenberg never fully recovered physically, he resumed composing just weeks after the incident and redirected the course of his trio to reflect the experience of his todesfall. Schoenberg confided to one friend that the many disorienting jump-cuts in the material were representative of the semi-conscious state of his recovery, and to a student claimed that one moment in the work—a "blackout" fermata in the first movement after a period of intensely dissonant trauma—represented the kickstart of his heart by injection. However, Schoenberg maintained his outspoken distaste for program music, and never formally acknowledged this influence on the piece.

The String Trio resurfaced Schoenberg's interest in condensing the emotional arc of a four-movement sonata into a single movement, a musical problem that occupied him for much of his early period. Schoenberg's mathematical manipulations here belie the mastery he acquired over 40-odd years of working with 12-tone rows, teasing his matrices to imply the harmonic cadences he left behind. Reciprocally, on the macro level, the work is broken into a five-movement arch form—possibly a nod to the Fourth and Fifth Quartets of Bartók, of decades prior—that is arguably reminiscent of single-movement sonata-allegro form, with certain motives reappearing and developing throughout.

Many historical forms flitted across Schoenberg's consciousness during this time. He was an Austrian expat forced to cross the ocean in 1933 due to rising anti-Semitic sentiment in Europe, and the fragments of waltzes drifting across the trio's jagged surface suggest a bitter longing for his roots. Schoenberg's complicated nostalgia can be understood through Charles Rosen's view that the trio is "a memorial to [Schoenberg's] own momentary death"—as a memorial is a remembrance of the course a life took, the trio can be seen as a reflection on Schoenberg's place in history. Indeed, posterity reveals more than a few parallels between this late period of Schoenberg's career and the last works of Beethoven: The qualities of fractured rhetoric; halting, broken phrases; and a seeming inability to settle into a stable musical space all permeate the final entries of both composers, each stricken with grave illness in their waning years.

Heron. Rain. Blossom. for Flute, Clarinet, Viola, and Cello Alexandra du Bois Born August 16, 1981 in Virginia Beach.

Composed in 2020; commissioned by CMS.

Tonight is the world premiere of this piece.

Duration: 15 minutes

grasses lie unseen in the field under the snow the white heron hides itself in its own appearance. –Eihei Dōgen (1200-1253) Northeast native Alexandra du Bois cites a connection to nature from a young age as part of the impetus behind her compositional life. A sense of environmental and social justice pervades her work, which David Harrington of the Kronos Quartet described as "a conscience in a time of oblivion, countering abuses of moral authority with an internal, personal sound."

As the composer notes, "*Heron. Rain. Blossom.* explores tone and beauty of breath inherent within single-line instruments focusing on sound as voice, breath, and feeling." Du Bois frequently draws upon great thinkers for inspiration; her portfolio includes works inspired by the words of Bob Dylan, Thich Nhat Hanh, and Federico García Lorca. The composer cites three interrelated points of influence here: Japanese Zen master and poet Eihei Dōgen, Zen painter and calligrapher Kazuaki Tanahashi, and Abstract Expressionist painter Mark Rothko—relating the three in terms of "spatial depth and meditative power, their images and philosophies seamlessly interchanging with one another," in the composer's words.

She continues: "While 'heron' is represented through the Dōgen waka poems (waka is a precursor to the ubiquitous haiku form), and several monochrome Rothko canvases, 'blossom' in the title refers to the blossoming of the heart from sitting in silence while weathering the never-ceasing mind. 'Rain' references what is always washed away; all thoughts must pass through, like rain, but not stay with us."

Du Bois intends to represent Dōgen's heron "as one with its own nature or environment, and as one with breath." Like haiku, the waka medium focuses on scansions of 5 and 7 syllables, and du Bois in turn "focuses on meters and patterns of 5 and 7, and their shape and irregularity. Inhales and exhales for counts of 5 and 7 inform both melody and meter throughout the construction and thematic material of the work."

Invoking Buddhist philosophy, du Bois de-emphasizes linear temporality, "instead seeking space and the place where heart and mind merge—through the awareness of breath that drives the work." The three movements can be performed in any order and do not incorporate the customary pauses in between, allowing for an uninterrupted wash of sound.

Paludes for Flute, Clarinet, Violin, Viola, and Cello

Tristan Murail Born March 11, 1947 in Le Havre, France.

Composed in 2011. Premiered on September 30, 2011 in Strasbourg, France by Ensemble Cairn.

Tonight is the first CMS performance of this piece.

Duration: 10 minutes

Paris in the early 1970s found composers Tristan Murail and Gérard Grisey—the forefathers of what has come to be called spectralism—beginning their investigations into the physical, acoustical properties of sound. They observed the layers of overtones that comprise timbre—which allows a listener to distinguish the textures of different instruments even while they play the same note in the same octave—and used their findings as the inspiration for a new compositional idiom. Murail has referred to spectralism as the bridge between composers whose main investigation is in form, and composers who are preoccupied with sound itself.

Murail's *Paludes* ("marshlands"), composed roughly 40 years after the inception of this technique, displays its mature application. Setting the piece in the remote environs of the novel from which it takes

its name, André Gide's *Paludes,* Murail represents the marshlands by instructing the performers in extended techniques meant to represent the animals of the marsh, such as the frog and the jay. He provides extremely specific notation for each instrument to facilitate specific resonances, calling for certain muted violin strings on the violin and novel multiphonic fingerings in the winds to mimic, tastefully, this wildlife's complex calls. In an homage to Gide's evasive prose, Murail calls *Paludes* "a strange little book, it is the story of... and then, no, there is no story. The subject of *Paludes*, is *Paludes*—as we would say today in program notes: a 'mise-en-abyme.'" The mise-en-abyme, or the picture-within-the-picture of self-reflection (popularized in Hollywood by Christopher Nolan's *Inception*), can be seen both directly and conceptually in *Paludes*. Near the end of the work, an endlessly descending, spiraling canon gives the listener the feeling of being drawn in to a repeating yet shrinking series. The philosophy of spectralism itself continues that metaphor: By finding organizing principles and harmonic relationships in sounds and using those to notate music that itself represents harmonious or discordant principles, Murail produces an infinite fractal of possibilities.

Quartet No. 4 for Strings, "Amazing Grace"

Ben Johnston Born March 15, 1926 in Macon, Georgia. Died July 21, 2019 in Deerfield, Wisconsin.

Composed in 1973. Premiered in 1973 in Milwaukee, Wisconsin by the Fine Arts Quartet.

Tonight is the first CMS performance of this piece.

Duration: 12 minutes

In 1943, Ben Johnston, first-year Master's in Music candidate, grew disenchanted with the tunnel vision of the curriculum at Cincinnati Conservatory. He defected from the academy to apprentice in Northern California with the instrument builder and microtonalist Harry Partch. Using naturally occurring ratios found in the harmonic series, Johnston started composing serial, highly-controlled works using extended tuning systems—resulting in pieces with more than 50 notes per octave, far removed from the traditional 12 pitches in the equal-tempered chromatic scale. By 1963, now quite distanced from the musical establishment, Johnston wrote that the error of atonality was in "an abandonment of the problem of rendering complexity intelligible;" after all, "music is first of all for the ear."

Originally believing that he could redeem the "muddy sound" of serialism by expanding the palette of the composer beyond 12 notes per octave, Johnston eventually became interested in broadening tonality, rather than breaking it down. 1973's String Quartet No. 4 brings to bear all of Johnston's expanded tuning theory and rhythmic proportionalism, using as a basis the simple melody of the hymn "Amazing Grace." This reference to folk tradition places Johnston comfortably in the lineage of antecedent American hymn-setter Charles Ives.

The variations in Quartet No. 4 successively explore three different tuning systems, each with a greater number of possible pitches than the one before, to construct an increasingly complex soundscape while staying true to the "Amazing Grace" hymn. The composer describes it as an "increasing proliferation not only of notes but of microtonal scale degrees..." and explains, "I wanted the associations of the words and images of "Amazing Grace's" various verses to determine how I treated successive variations." The statement of the work's theme and its first two variations are set in Pythagorean intonation, based on the mathematical ratio of 3:2, which corresponds to the interval of a just perfect fifth. In Variation II,

Johnston introduces a rhythmic device that mimics the tuning ratio. Variation III introduces 5-limit tuning, which produces a seven-note scale that sounds like the equal-tempered major scale. By Variations IV and V, the 7-limit system is able to approximate the equal-tempered chromatic scale. Johnston combines and divides these three tuning areas to continue Variations VI through X. The omnipresent "Amazing Grace" theme serves as reference point through these alien yet somehow familiar sound worlds.

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