

Composing *Breathtails* (a Song Cycle in 21 Breaths)

Anne LeBaron

#1: *unleashed in the composer candy store*

My good fortune: a commission from Mutable Music for baritone Thomas Buckner, with some unusually open conditions: no restrictions on duration, instrumentation, or delivery time. There's more: an invitation to engage in a collaboration with a living poet.

#2: *breath – at the center*

I immediately envisioned a piece with a central role for the shakuhachi (Japanese bamboo flute),¹ simply because I adore the instrument and its earthy and ethereal colors. Sonic images of breath-driven sonorities emanating from the shakuhachi, combined with the human voice and its infinite variety of breath sounds, grew to include strings—the most “vocal” of Western instruments. My desire to explore the notion of breath in this composition led to a collaboration with poet Charles Bernstein, culminating in a series of fierce, witty poems. Essentially a secular treatment of ruminations on the breath, the poems embody references, often quirky, to yoga, Buddhism, and meditation.

#3: *why Breathtails (as opposed to Breathtales)?*

Charles Bernstein suggested this title. It immediately struck me as perfect for the piece. By his own admission, Charles is obsessively drawn to the “wrong” version of a homophone. In response to my query about the tail/tale business, he clarifies: “The sense of tales of breath is there, irrevocably. For our work, it’s a call to attentiveness, slight shifts of spelling creating other meanings. But also trails of breath that one leaves if you could make the breath, say of the singer, visually manifest itself like smoke rings from a cigarette. For some reason I also think of dragon tails in ancient Chinese paintings . . . or angel tails.” (personal communication, July 9, 2013) For me, the title conjures yet another image, of wispy echoes of sound left in the wake of the shakuhachi music.

Current Musicology

#4: *21 poems*

I was fixated on a total of 21 poems due to my attraction, for numerological purposes, to the number 3. I wanted a compound number that could reduce to 3 when the digits were added. The number 12 seemed to be too small, and 30 too large—hence, 21, manifested in different ways throughout the piece. Indeed, the basis of Song 11 is that poem's 21-line structure.

#5: *counting breaths*

How many physical breaths were required to complete *Breathtails*? An investigation, using low-tech and esoteric math, led to some surprising results.

Consideration:

My first email inquiry to Charles Bernstein: Oct. 19, 2007 (2:32 PM)

Final delivery of the musical score to Tom Buckner: Aug. 11, 2011 (2:06 AM)

The 1392.5 days between those two events resulted in the inhaling and exhaling of approximately 36,093,600 breaths—a number sporting some intriguing properties.²

How did I arrive at this figure, 36,093,600?

25,920 = approximate number of human breaths in a 24-hour period (each "breath" consisting of one inhale/exhale);

1392.5 = number of days between my first email to Charles Bernstein and the date of score delivery;

$25,920 \times 1392.5 = 36,093,600$ breaths!

#6: *gift of time*

Why did it take all these millions of breaths, spanning nearly four years, to compose *Breathtails*?

Inter-ruptures:
illness
prior creative commitments
teaching

Underscored by:
no deadline

#7: *January 20, 2013*

Today
the sun–drenched wind
whistles and whirls,
a serendipitous quasi–sostenuto.
Gliding to–and–fro
on a swing my husband built
overlooking the grand sweep of
Green Valley, California,

immersed in the rush
of earth’s breath
in all her infinite nuance,

I’m inspired to recollect
the construction of *Breathtails*
in reverse gear.

#8: *nourishment from the cosmos*

Which brings me to Rudolf Steiner.³ What he wrote about breath:

“Man’s breathing is a living expression of the course of the sun.”⁴

What he advised before falling asleep: to recount, in reverse, one’s activities of the day. (And, for teachers, prior to sleep, he suggested an additional step: invoking the likeness of each student, and regarding that image with love.)

#9: *wind, bamboo, wood*

Although I first encountered live shakuhachi performances during a visit to Japan in 1983, recordings I heard a few years earlier of Toru Takemitsu’s works, especially *November Steps*,⁵ left an indelible impression. Some years later, during the 1996 International Computer Music Conference held in Hong Kong, I attended a concert where Riley Lee⁶ performed works for electronics and shakuhachi. Hearing the instrument in this contemporary context, particularly with an electronic component, was a revelation. I couldn’t imagine, at that time, that I would eventually not only write for the instrument, but would perform and record (on my harp) with a player. This came to pass when I held the Visiting Darius Milhaud Professorship

at Mills College where Kiku Day, a shakuhachi player, studied composition with me. During the period that I taught at Mills, Kiku and I, along with koto player Kanoko Nishi, made a studio recording of trio improvisations.⁷ I subsequently asked Kiku to perform the shakuhachi part in my opera, *Wet*, which was produced at REDCAT in Los Angeles.⁸

The sounds of the shakuhachi are of this world and yet, otherworldly. The Fuke sect of Zen Buddhist monks in Japan, known as “priests of nothingness,” were renowned for their shakuhachi performances of “honkyoku” songs.⁹ For them, the shakuhachi was a spiritual instrument. Paced to their breathing, the very act of playing it was a meditation. Indeed, when I listen to shakuhachi music, I find myself transported, enveloped in an aura of all-pervasive calm. Therefore, it seemed natural to conceive of an instrumentation for this composition that included shakuhachi. After all, it would be written for Tom Buckner, a gifted and fearless singer equally adept at performing notated and improvisatory music (and everything in between), and a committed supporter of composers and musicians. I began to imagine the shakuhachi functioning as a bridge, connecting the string quartet to Tom’s voice.

Bamboo, the plant from which the traditional shakuhachi is constructed, is extremely versatile. While used for culinary preparations, medicinal treatments, textiles, paper, and musical instruments, it’s also valuable as material for construction, sometimes replacing wood. This similarity to wood aligns the shakuhachi, in this respect, with the wooden instruments of the string quartet. Yet it is essentially a wind instrument, bringing it into the sphere of the voice. Unlike Western wind instruments, the shakuhachi has no metal components, being constructed solely of bamboo. In this way, it has a direct affinity with the human voice: both are elemental, yet also essentially complex, despite their apparent simplicity.

When composing *Breathtails*, I didn’t wish to impose extreme demands on the player. Rather, I wanted to allow the instrument to bloom with a natural clarity, while coloring the voice, the strings, and sometimes the poem itself. While designing the form and other elements of the piece, prior to the actual composing, I primarily listened to recordings of Tom Buckner singing, as well as both traditional and contemporary solo shakuhachi music. Score study was essential, and I found Frank Denyer’s scores to be especially helpful.¹⁰ Books such as Minoru Miki’s *Composing for Japanese Instruments* provided detailed information regarding techniques and notation, with an accompanying CD illustrating the notated examples. Selected

journal resources and online sites were also useful.¹¹ When the outstanding performer Christopher Blasdel¹² visited the California Institute of the Arts, where I teach, I asked him to play through some of the material composed by that time. In fact, I had been consulting his book, *The Shakuhachi, a Manual for Learning*, for assistance with the techniques and terminology of the instrument. Hearing him play through these preliminary sketches confirmed that my writing for shakuhachi was going in a productive direction. His suggestions regarding notational nuances for the instrument were most insightful.¹³

#10: 13 songs, 21 breaths

Described as a “song cycle in 21 breaths,” *Breathtails*¹⁴ is comprised of 13 songs and 8 Breath Interludes. Originally I asked Charles Bernstein to write 21 poems¹⁵ (which we also thought of as “breaths”), but I felt that with his 13th poem, the cycle was complete. How, then, should the remaining 8 breaths be integrated into the composition? Early in the process of living with the poems and investigating their possibilities, I was drawn to a collection of textured white papers in a stationery store near UCLA. Purchasing one of each, I imagined integrating them into the composition in some fashion. But throughout the composing process those papers remained an enigma, lying dormant in their brown paper bag until just after the piece was completed. (Or so I thought—in fact, it wasn’t yet finished, since the Breath Interludes had not yet been conceived.)

While contemplating these lovely letter-sized sheets of papers at my desk, conjuring images of Tom Buckner performing the piece,¹⁶ an epiphany! For the 8 remaining breaths, I would offer him guided improvisations, via those white papers. The textures of the papers—rough, smooth, swirling, transparent, and some embedded with rose petals—suggested specific senses: touch, sight, and smell. I cut a 4” x 4” square from each, labeling the squares with one of these three senses. The more roughly textured or extremely smooth papers seemed most appropriate for the sense of touch; visually oriented textures, for sight; and thicker papers, for smell. (These would be infused with a scent prior to the performance.) The score invites the singer to freely select a sheet of textured paper labeled with one of the senses, at eight specific points. Drawing upon the sense of touch, sight, or smell labeled on the selected paper, and the qualities of the paper itself, the singer improvises within the context of the score. The general style and duration of each Breath Interlude is influenced by the singer’s awareness of what has already transpired in the music and poetry, and what is to come.

Current Musicology

(In the future, perhaps the senses of hearing and of taste should be engaged as well. Is it possible to hear the essence of a stationary piece of paper? Could it have a discernable taste?—*a milky aroma enlivened by a hint of saltiness, wrapped in a gossamer veil of white honey . . .*)

#11: *summary*

Breathtails, scored for baritone singer, shakuhachi, and string quartet, consists of 13 poems, studded with 8 Breath Interludes¹⁷ to be freely interpreted by the singer, guided by sensory input from randomly selected squares of textured white paper as well as by the surrounding music and poetry.

How does the form of each musical “breath” connect to the poems? A redux:

#12: *jupiter mountain breakdown*

Back in that swing facing Jupiter Mountain, while considering approaches to this essay, I recall the beginnings of *Breathtails*. Wintery winds rush about, silently cavorting with the glowing conifer needles. White noise rushes into and past my ears—distinct from distant road and revving engine sounds, mingling with the occasional sustained hum of a small plane, dogs barking in call-and-response, wisps of rock music from someone’s far away home, and the insistent cawing of crows. A sonic snapshot of a Sunday afternoon in Green Valley: six sounds, half generated from nature, the other half from human invention. All co-existing, each with its own distinctive shape, timbre, amplitude, duration, even tessitura. And that swirling wind, giving rise to breath of one sort or another, a constant, knowing no boundaries, the ever-present backdrop.

#13: *candy store again, second floor*

When Tom Buckner invited me to compose a work for him with my choice of text (living or deceased writer, or write it myself) and instrumentation, I immediately knew that I wanted the poetry to focus on the breath, and that the shakuhachi, with its haunting breath-infused sonorities, would be central to the ensemble. What a rare opportunity—a coveted chance to collaborate in a non-operatic context (and thus dispense with all the baggage that such endeavors can sometimes entail) and to tailor the composition for a singer whom I greatly admire. The choice of string quartet, to complete the ensemble, was made intuitively—a united front that would function alternatively and at times simultaneously as a foundation, a foil, and a Greek chorus.

My friend Marjorie Perloff, the brilliant poetry critic, suggested several poets to me for consideration. My investigations led to the evocative, innovative, and risky work of Charles Bernstein, whose writing I was already familiar with—primarily his remarkably inventive libretto for *Shadowtime*, an opera by Brian Ferneyhough. Charles and I explored notions of “breath” together, via phone, email, and face-to-face meetings in New York, where we breathed the same air. I made some suggestions up front, such as the number of poems I’d like to have in the piece, their general trajectory, and a desire for the occasional deconstruction, facilitated by isolating syllables and phonemes. I also shared some of my research related to breath and breathing with Charles. Ultimately, I wanted to set his poems for *Breath-tails* in ways that would reflect and enhance his uncanny ability to infuse playfulness with gravitas—or vice versa.

Early in the process of composing *Breath-tails*, I purchased one copy of all the different textured white papers carried by a Westwood shop specializing in fine stationery. Lacking any hue, they invoked an aura of invisibility, of purity, of serenity, yet were charged with individuality. Some were even transparent, allowing light to pass through. They all had woody origins.

Perhaps they became talismans.

#14: *breathing the course of the sun*

Why so much focus on the breath? Rudolf Steiner believed that with our first breath, we take in nourishment from the cosmos, along with the element of soul. The latter functions, in part, to keep us breathing until our very last breath, when the soul element is set free, returning to the spiritual world. Steiner calculated that humans inhale/exhale 18 times a minute, equating to 1080 times per hour, and 25,920 times in a full 24-hour day. He then estimates that if a person lives 72 years on average, she would live as many days ($72 \times 360 = 25,920$) as she draws breaths in *one* day.¹⁸

Imagine 72 years to be one cosmic day, and one single breath; multiplying by 360 results in one cosmic year, or 25,920 “cosmic days.” In other words, Steiner calculates that 25,920 represents a “cosmic year” ($72 \text{ years} (= 1 \text{ single breath}) \times 360$), and that the sun requires 25,920 years to pass through all the signs of the zodiac. He concludes that we accompany the sun’s circuit of 25,920 years, from its rise in Pisces marking the spring equinox (March 21), as it moves through all 12 signs of the zodiac, and as it returns to rise in Pisces once again, completing the circuit. Our longest breaths on

Current Musicology

earth are the initial breathing in of soul and spirit at birth, and breathing these elements out at death. However, we take our absolute *longest* breath, according to Steiner, when entering the world of stars, accompanying the sun during its circuitous traversal of 25,920 years. Reflecting on the order prevailing in the universe, and marveling that a human breathes as many times in a day as the sun needs years to make its circuit of the universe, Steiner concludes: “Man’s breathing is a living expression of the course of the sun.”

How did these esoteric computations of Steiner, which contributed to my initial research and plans for the piece, affect my composing process? It’s impossible to articulate, yet something in my creative process was triggered—unidentifiable, unnamable, ineffable.

#15

“As long as there is breath in the body, there is life. When breath departs, so too does life. Therefore, regulate the breath.”¹⁹

#16: *collaboration*

My correspondence with Charles Bernstein, despite unforeseen obstacles of significant health crises for me and, later, unspeakable tragedy for him, exemplified an ideal composer/writer collaboration. We maintained a stimulating dialogue, trading suggestions for readings, concepts, and serendipitous notions related to the breath and the act of breathing. An email correspondence began in 2007, with Charles inquiring about temporal dimensions and matters of structure, while mentioning Charles Olson’s 1950 “Projective Verse” that emphasized the centrality of the breath (as line) for poetry. In response to my reference to “der Atem,” a German word for breath, he was reminded of Paul Celan’s *atemwende* (translated by Pierre Joris as “breathturn”)—also the title of the first of three major volumes of poetry by Celan. Sharing my research with Charles, I sent readings connected to the Buddhist “minding of breath,” including the Anapanasatti Sutta, along with selections from Rudolph Steiner’s writing on the cosmic scale of breath. He worked with many of these texts and sources as he developed the poems for *Breathtails*, augmented by his own source material. (Osip Mandelstam, for example, inhabits the first poem.) We explored various permutation strategies in poetic and musical contexts, clearly observable in some of the poems.

#17: *leaving the station*

The train of selected correspondence between and composer (AL) and poet (CB):

DESTINATION	AL	CB
Ideas vaguely forming		11.24.07
AL, elated, welcomes CB to project	11.26.07	
Olson (Dada) / Celan: atem-wende	12.21.07	
Fractals/breath/21	12.27.07	
10 of 21 done, having fun		2.4.08
Myocardial infarction, not having fun	2.6.08	
Looking back on life from the other side of it		2.7.08 (12:35 PM)
Your first 4, a balm and gift	2.7.08 (11:59 PM)	
12 of 21 now – end with acute breathlessness		2.24.08
Luscious, ripe for setting	2.25.08 (12:11 AM)	
Negative space?		2.25.08 (8:00 AM)
Mandelstam's windowpanes of eternity		2.26.08 (3:57 PM)
Neshemet ruach chayim, or Prana	3.4.08 (5:27 PM)	
Instrumentation & underlying poetic structures	3.4.08 (5:38 PM)	
Publishing the libretto		6.22.08
Song #10: 4 cycles distributed among 5 performers	6.23.08	

#18: *setting the rules*

Before placing Bernstein's poems in a musical context, I lived inside, outside, and around them, turning each one over and over, a malleable prism for the imagination. Charts and graphs were constructed to function as

Current Musicology

maps guiding me into the piece—a kind of twisted Schenkerian impetus to prolongation, but moving way beyond the “tonal space.” One pre-compositional chart related various parameters to each poem—i.e., interpretive ideas; treatments of string quartet and of shakuhachi; methods of breathing; indications of physical movements for the vocalist. Ultimately, the poems broke through these structural constraints and had their own way with the music.

#19: *time and breathing*

Some of the songs are in strict tempi, regulated by bar lines, while others are freer, with bar lines and time signatures banished—and these contrasting treatments also occur *within* certain songs. (This is true horizontally as well as vertically—i.e., there are passages combining freedom in the execution of certain parts with simultaneous regulation in other parts.) Notation for the baritone voice includes symbols for different methods of inhaling and exhaling. Various types of breathing are suggested for the singer during the Breath Interludes: noisy; quiet; fast; slow; regular; irregular; jerky; smooth; deep; shallow; forced; effortless; through the mouth; through the nose; nervous/anxious; relaxed/peaceful; and breathing as a function of the whole body, soul, and universe, as in the practice of Pranayama.

#20: *underpinnings*

One of the recurring and unifying compositional choices was double harmonics in the strings (Ex. 1). They were chosen for their specific sound quality, for the pitch content, and for their symbolism related to the act of breathing.²⁰ The principal shakuhachi line is a solo passage constructed from a series of pitches derived from segments of the twelve-tone row of Alban Berg's *Violin Concerto*.²¹ Structurally important on a number of levels, this shakuhachi passage frames the piece at beginning and end, and often appears throughout, fragmented or otherwise transformed.

#21: *song 1*

In the first song, the shakuhachi represents eternal breath—magnified and extended in the strings by a glassy pane of four double harmonics (at times, sustained, at other times, frantic) pressing against the singer's anxious human gasping, or by white noise—a kind of “faux” breath induced by bowing the wooden body of the string instruments, enhancing the shakuhachi's breathiness. (Ex. 2 and 3)

#22: *songs 2 and 3*

As the “world passes by” in the second song, the music rushes headlong into pilings—on of ostinati in the strings, offset by meditative, sustained passages in the shakuhachi, along with the singer’s serene delivery. In contrast, the third song functions as a reflective commentary, with downward quasi-glissandi in the spoken voice and strings, and a general descending motion in the shakuhachi as well. The string players ultimately reach a place where they audibly inhale and exhale while bowing the instrument body—barely perceptible, “on the border” of sound. (Ex. 4)

#23: *songs 4 and 5*

The music of Song 4, with its breathless series of permutations in the text, was intended to be difficult for the singer, requiring a delivery not supported by the breath (counter to best practices!).²² Torturing the vocalist to such an extreme would likely backfire or at the very least, lead to compromises. So instead, I composed a stylized “breathlessness” into the song, with bursts of accented inhalations and exhalations. Meanwhile, the strings are rushing about playing tremolo phrases that recur in subtly displaced patterns, keeping the balance slightly off. The end of this song elides with the beginning of Song 5.

By virtue of its length, its episodic nature, and the vocal participation of the players, the fifth song is the most complex of all of the 13 songs. In the form and content of the poem, there are many references to the Anapanasati Sutta.²³ The poem for this song goes into a retrograde at its center. In different formations determined by a schematic,²⁴ the string players speak those words enclosed by parentheses in the poem. (These are in the third person and refer to the person reciting or singing the main text.) In preparation for the emphasis on syllables, vowels, and phonemes in two of the subsequent songs, I’ve elongated, deconstructed, and repeated certain words. The shakuhachi often “shadows” the singer, imitating or supporting him. (Ex. 5 and 6)

#24: *song 6*

Song 6 is related to Song 5 by virtue of the text spoken by the string players (“with reference to the work”). In Song 6, however, they speak in a more neutral, straightforward, repetitive response to the singer. The strings play a driving, syncopated, constantly shifting rhythm throughout, while the singer has a more “floating” sense of time—that is, until he aggressively

Current Musicology

snaps his fingers in rhythm with the cello during the passages spoken by the rest of the quartet. In this way, the singer projects a more concrete (and less disembodied) connection to the string quartet.²⁵(Ex. 7)

#25: songs 7, 8, and 9

Songs 7, 8 and 9 are pithy, characterized by increasing fragmentation of the text. Breath Interludes #3 and #4 connect these three songs. The 20 lines of Song 7—one word per line—refer back to the text of the first song (as do Songs 8 and 9), so the music recycles the material introduced in Song 1 as well. The reprise of the shakuhachi melody, now shared with the singer (who “shadows” the shakuhachi), results in a shak/singer duo with a short coda of “breathing” by the strings. (Ex. 8)

The textual and musical fragmentation becomes more pronounced in Song 8, with 21 lines of text amputated from its origins (“eth ettle on etern ut,” and so forth). The vocalist sings fragments originating in the long phrase of the shakuhachi from Song 1, over an articulated cello drone and a quasi-imitative viola.

In Song 9, the shakuhachi reprises the main theme heard at the beginning of the piece, and functions to frame the beginning and end of the song (divided into three sections of 7 lines each), while the strings perform a simple ostinato figure against the vocal line. When the alphabet is literally scrambled in the text of Song 9 (the first 7 of 21 lines: “tling o ops nly tu etern ut”), I set the text fragments as though they were real words and meant to be comprehended as such, and instruct the singer to interpret the material with great conviction.

#26: song 10

A kaleidoscopically absurdist feast of imagery, cleverly personalizing numbers from 1 to 21, characterizes the poem for Song 10. A perpetual-motion 16th-note figure winds its way through the ensemble—sometimes autonomous, and sometimes shared. The instruments are encoded by a numerical pattern related to the additive structure of the poem. A schematic for correlating the form of the music with the text was constructed with a pattern determined by the coding system, indicating how the instruments would be activated in this song. To demonstrate:

Vn.1 = 1
 Vn.2 = 2
 Va. = 3
 Cello = 4
 Shak = 5

Line of poem	Instrument entering (or remaining) in the fray
1	1
2	2
3	3
4	4
5	5
6	1 + 5
7	2 + 5
8	3 + 5
9	4 + 5
10	5 + 5
11	1 + 2 + 3 + 5
12	1 + 2 + 4 + 5
13	1 + 3 + 4 + 5
14	2 + 3 + 4 + 5
15	1 + 2 + 3 + 4 + 5
16	1 + 2 + 3 + 4 + 5 (+1)
17	1 + 2 + 3 + 4 + 5 (+2)
18	1 + 2 + 3 + 4 + 5 (+3)
19	1 + 2 + 3 + 4 + 5 (+4)
20	1 + 2 + 3 + 4 + 5 (+5)
21	spoken by singer

In the first ten lines, the additive schematic works beautifully: with each subsequent number, another instrument is added or retained, equaling (by virtue of the coding system) the number of the line of the poem. Beginning with the 11th line of this poem, I felt that the music needed to sustain its forward propulsion, hence the additive schematic was abandoned, trumped by the insistence of intricate rhythmic subdivisions already set loose in the piece (such as a bar of 11/16 + 11/16 (or 5/16 + 6/16 + 5/16 + 6/16). Furthermore, the 11th line of the poem, “11 runs like rivers under the night,” justified and solidified my decision to keep the perpetual-motion figure alive. The second half of this song is therefore driven by the essential material laid out in the first 10 lines, and does not adhere to the schematic (see crossed-out carefully laid plan). (Ex.9)

Current Musicology

#27: songs 11 and 12

Songs 11 and 12 are joined at the hip, so to speak, despite the intrusion of Breath #6. The former has a more conventional song structure, suggested by the form of the poem and its regular rhyming, constrained to the long “a” vowel. The musical setting of the latter, functioning in poetry-land as a mashup of Song 11, is divided into three groups of seven lines each.

#28

The seventh Breath Interlude, the only interpolation of breath that is scored (as opposed to a free interpretation), serves as a premonition of the final song. Save for the initial breath improvisation, the singer is absent. Instead, nuggets of phrases or single words lifted from the last poem—sometimes split into syllables—are disseminated among the string players. The shakuhachi performs a variant of the main theme that began the work. (Ex. 10)

#29: song 13

Song 13 reflects, in the poetic form, Steiner’s focus on 18 breaths per minute. The poem has 36 lines (18 x 2), broken into 4 stanzas of 9 lines each, 3 words to each line. (Note the predominance of 9; $3 \times 9 = 27$ (!), a cool, serendipitous connection to 36,093,600—the projected number of breaths it took to complete the piece.)²⁶ This last song should convey a gently assertive quality, and function as a resolution of sorts. Therefore, musically, this is the most declamatory setting of all the songs. The return of the predominant shakuhachi material provides a mini-coda to the piece. The final and eighth Breath Interlude reflects the attentive breathing of all performers, extending the shakuhachi coda beyond the performance time of *Breathtails*, spinning it out, like tales and tails, into space and time.

#30

Breathtails was composed in cherished memory of Emma Bee Bernstein.

resultant pitches for double harmonies
in *Breathtails*

The image displays a musical score for three instruments: Violin I, Violin II, and Viola. The score is organized into three systems, each with a staff for the instrument and a corresponding staff above it showing resultant pitches. The instruments are in G major (one sharp). The first system shows double harmonies in the first two measures, with resultant pitches indicated by a sharp sign (#) above the staff. The second system shows double harmonies in the last two measures, with resultant pitches indicated by a flat sign (b) above the staff. The third system shows double harmonies in the last two measures, with resultant pitches indicated by a sharp sign (#) above the staff. The notation includes notes, stems, and beams, with some notes marked with a circled 'o'.

Example 1

Song #1

8
32

mf *fff* *p*

B
pressed a- gainst the win - dow pane when e - ven as I stop the
Shak. wide vib. *stop suddenly with singer's word 'stop'* *stop suddenly with singer's word 'stop'* *stop suddenly with singer's word 'stop'*

Vln. I *ff* *stop suddenly with singer's word 'stop'*

Vln. II *ff* *stop suddenly with singer's word 'stop'*

Vla. *ff* *stop suddenly with singer's word 'stop'*

Vc. = 132 *accel. (cello only)* *ff* *gradually move to sul pont, then end with singer's word, 'stop,' on scratch tone*

f *fff*

falsetto (should sound strained)
ossia: gliss as high as possible

♩ = 66 *accel.*

35

B

Shak. pain *mp* *f*

Vln. I *p*

Vln. II *p*

Vla. *pp*

Vc. *ppp* 5 *pp* 3 3 3 3

Example 3

Current Musicology

♩ = 72 (ossia 8va) Song #1

mp cresc. ----- 9

38

B. pres - ses a - gainst me

Shak.

Vln. I *cresc.*

Vln. II *cresc.*

Vla.

Vc. *mp* *mf* *cresc.*

40 *f* **BREATH #1**

B. *f*

Shak. *ppp* (overlap with singer's Breath #1)

Vln. I *f* (singer's Breath #1)

Vln. II *f* (singer's Breath #1)

Vla. *niente* (singer's Breath #1)

Vc. *f* (singer's Breath #1)

whistle tones: alternate around Eb and F



Example 3 (continued)

Current Musicology

26

Song #5

48

mf

f (independent from SQ until next metered section)

time and space I will brea(the)

p *mf* *p* *mp* *pp*

pizz. *forcefully* arco *slow gl., as smooth as possible* sul pont

she pro - tests

mf *p* *mp* *pp*

mf *p* *mp* *pp*

mf *p* *mp* *pp*

mf *p* *mp* *pp*

51

ee ee ee

ord

mf *p* *mp* *pp*

Example 5

Song #5

52 27

B *p wide vib. (1/2 step)*

ee ee ee ee breathe

Shak

Vln. I

Vln. II

Vla. *sul pont* *ord mp* *wide vib*

Vc. *mp*

54 *pp accel. molto* -----

B in with out hope

Shak

Vln. I *(ord) (move to) sul pont f (move to) ord p (move to)*

Vln. II *pp* *mp* *3* *sul pont*

Vla. *pp* *molto* *f* *mind-less mp 3* *ly (move to) sul pont*

Vc. *pp* *pizz.* *f* *mind-less mp 3* *ly (pp)*

p *mind-less ly*

Example 5 (continued)

8

B *put-ting a-side need and care*

Shak

Vln. I

Vln. II

Vla.

Vc.

12

finger snaps (alternate hands)

grad. lift arms from waist high to overhead
(sync snaps with cello and shak)

B *f*

Shak *p*

Vln. I with re-fer-ence

Vln. II with re-fer-ence

Vla. with re-fer-ence

Vc. *p mp*

Example 7

44 (both hands snap) Song #6

15

B

Shak

Vln. I

Vln. II

Vla.

Vc.

mf *f* *pizz.*

to the work *pizz.*

to the work *pizz.*

to the work

mf *f*

19 *f* (return to floating 4/4')

B

Shak

Vln. I

Vln. II

Vla.

Vc.

Art - less ber serk and stri - dent

f *arco* *arco* *arco* *f* *sim.*

The musical score is divided into two systems. The first system (measures 15-18) features a bassoon (B) and shakuhachi (Shak) with a 'both hands snap' instruction. The strings (Vln. I, Vln. II, Vla., Vc.) play a rhythmic pattern. Dynamics range from mezzo-forte (mf) to forte (f), with a pizzicato (pizz.) instruction for the strings. The lyrics 'to the work' are present. The second system (measures 19-22) begins with a forte (f) dynamic and a '(return to floating 4/4\')

Example 7 (continued)

Current Musicology

7 + 7 + 7 + 7
16 16 16 16

Song #10 62

18

B

Shak
night

Vln. I

Vln. II

Vla.

Vc.

6 + 6 + 6 + 6
16 16 16 16

5 + 5 + 5 + 5
16 16 16 16

19

B
Twelve is all o - ver be - fore it start - ed Thir - teen is ___ be - lov - ed of all ___ in - con -

Shak

Vln. I

Vln. II

Vla.

Vc.

Example 9 (continued)

Song #10

63 $5+6+6$
21 16 16 16

$5+5+6+6$
16 16 16 16

B $\frac{7}{16}$ $\frac{6}{8}$ $\frac{3}{8}$ $\frac{11}{16}$

Shak $\frac{7}{16}$ $\frac{6}{8}$ $\frac{3}{8}$ $\frac{11}{16}$

Vln. I $\frac{7}{16}$ $\frac{6}{8}$ $\frac{3}{8}$ $\frac{11}{16}$

Vln. II $\frac{7}{16}$ $\frac{6}{8}$ $\frac{3}{8}$ $\frac{11}{16}$

Vla. $\frac{7}{16}$ $\frac{6}{8}$ $\frac{3}{8}$ $\frac{11}{16}$

Vc. $\frac{7}{16}$ $\frac{6}{8}$ $\frac{3}{8}$ $\frac{11}{16}$

gru - ous saints Fou - teen is ___ for ___ flat tax

23 $5+6+5+6$
16 16 16 16

$6+5+6+5$
16 16 16 16

B $\frac{11}{16}$ $\frac{7}{8}$ $\frac{3}{4}$

Shak $\frac{11}{16}$ $\frac{7}{8}$ $\frac{3}{4}$

Vln. I $\frac{11}{16}$ $\frac{7}{8}$ $\frac{3}{4}$

Vln. II $\frac{11}{16}$ $\frac{7}{8}$ $\frac{3}{4}$

Vla. $\frac{11}{16}$ $\frac{7}{8}$ $\frac{3}{4}$

Vc. $\frac{11}{16}$ $\frac{7}{8}$ $\frac{3}{4}$

Fif - teen likes com-pote with a - pri - cots -

Example 9 (continued)

Current Musicology

75 interlude betw #12 & 13

14

B

Shak. *kara kano* *kazaiki* *yoko yuri* (as before)

Vln. I

Vln. II

Vla. *sul G*

Vc. *sul A*

p *mf* *f* *p* *f* *ff* *p* *fp* *f*

arco con sord.

rhy *c* *thm* *ra* *sure* *ic*

repeat freely

17

B

Shak. *ro kori* *ma washi yuri*

Vln. I

Vln. II

Vla.

Vc.

f *mf* *p* *f* *p* *sfz* *pp* *p* *f* *pp*

repeat freely

Example 10

Notes

1. *Shakuhachi* is a compound of two words indicating measurement: *shaku*, equal to 30.3 cm, and *hachi*, equal to eight *sun*, or tenths of a *shaku*. (The unit of measurement known as *sun*, or *cun* in Chinese, was originally used to chart acupuncture points.) Therefore, *shaku-hachi* translates literally as *one shaku eight sun*, or 1.8 shaku—a length of about 55 cm (30.3 + 24.24), the standard length of a shakuhachi. The 1.8 shakuhachi is tuned to D.
2. 3 and 6 surround their sum, 9;
 $9 \times 3 = 27$; $9 \times 6 = 54$; when the two digits are added, of each of these numbers (2+7; 5 + 4), they sum to 9—(or 3 squared);
 3 falls on the 1st and 5th places, followed both times by 6, in that long string of numbers representing the number of breaths;
 $3 \times 6 = 18$, also summing to 9 (1+8).
3. Active in the late nineteenth and early twentieth centuries, Rudolph Steiner based his work on direct knowledge and perception of spiritual dimensions. His particular philosophy, “anthroposophy,” can be described as “wisdom of the human being.”
4. Rudolph Steiner, *From Sunspots to Strawberries . . . Answers to Questions* (London: Rudolph Steiner Press, 2002), 156.
5. Commissioned by the New York Philharmonic in 1967 for its 125th anniversary, *November Steps* is scored for shakuhachi, biwa, and Western symphony orchestra.
6. The first non-Japanese to attain the rank of Grand Master, Riley Lee (who makes his home in Australia), has probably done more than any other Westerner to promote the shakuhachi around the world.
7. These recordings are now available on my 2-CD Innova recording, entitled *1, 2, 4, 3*, featuring collaborations with nearly one dozen performers during the decade spanning 2000–2010.
8. My next opera, *Crescent City*, included shakuhachi in the orchestra, for the New York City Opera VOX performances (2006 and 2009). However, in the full production that took place in Los Angeles in 2012, we replaced it with flute due to budgetary constraints.
9. The term “honkyoku” literally means “original piece” and can also refer to the repertoire of “original” songs for the shakuhachi, transmitted anonymously and aurally by the komuso monks of the Edo period (1603–1868). To learn more, Riley Lee’s PhD thesis, *Yearning for the Bell: A Study of Transmission in the Shakuhachi Honkyoku Tradition* (University of Sydney, 1992), can be accessed here: <http://www.rileylee.net/thesis.html>.
10. Denyer, a British composer, has composed extensively for the shakuhachi.
11. See, for example, Jeffrey Lependorf, “Contemporary Notation for the Shakuhachi: A Primer for Composers,” *Perspectives of New Music* 27/2 (Summer, 1989): 232–251. Online resources, while mostly focused on teaching and performing, are also worth checking out. A couple of comprehensive ones: The International Shakuhachi Society (<http://www.komuso.com/top/index.pl>) and the European Shakuhachi Society (<http://www.shakuhachisociety.eu/>).
12. Christopher Yohmei Blasdel studied the shakuhachi with Japan’s Living National Treasure, Goro Yamaguchi, beginning in 1972. Blasdel’s performance at CalArts, on April 27, 2011, included traditional honkyoku as well as contemporary works by Minoru Miki and Ryohei Hirose.
13. There are many playing techniques unique to the shakuhachi, including different degrees of emphasis on the sound of the performer’s breath (such as *muraiki*, *kazaiki*, and *sorane*), and various types of vibrato (*yuri*).

Current Musicology

14. The set of poems, with the same title, is published in Charles Bernstein, *Recalculating* (Chicago: University of Chicago Press, 2013), 111–119.

15. I asked for 21 poems because the number 21 carries a symbolic personal significance.

16. I was searching for ways to bring a more open, improvisatory approach to the vocal part, in contrast to the more “traditional” notation used in many sections of the piece.

17. There are eight “breaths” embedded throughout the piece, represented by special white papers in the score. The singer will draw out and embellish the “breath” of the papers by the senses of sight, touch, and smell, labeled as such. Each breath is a brief interlude, functioning a bit like a palette cleanser, between certain songs. The order of the types of breaths is determined by the singer, and may differ with each performance. Papers labeled with “sight” are distinguished by 1) curving, swirling, slithering tails and branches; 2) recurring white-on-white patterns; 3) smooth reflective surfaces. The singer is asked to interpret by the sense of sight as filtered through the breath. For those papers labeled with “touch,” sounds can be produced by running fingers, fingernails, a card, or other objects over the paper. The sound of the paper should be blended with, or lead to, the sound of the breath. (One “touch” paper has a rough texture; the other a smooth, matte texture.) For the thicker “smell” papers, the singer should ask a close friend, partner, or other loved one to infuse the papers with scented oils or perfume prior to rehearsals and performances. The “smell” breath improvisations will be inspired by the effect of these scented papers on the olfactory sense of the performer.

18. The 360-day calendar, represented by 12 groups of 30 days each (or 18 groups of 20 days), was used by ancient cultures such as the Babylonians, and continues to be useful for measuring durations in financial markets and computer models.

19. Attributed to Svatmarama, *Hatha Yoga Pradipika*—Ch.2, S.3 in B.K.S. Iyengar, *Light on Pranayama* (London: Unwin, 1981), 15.

20. Breathing, so central to this composition on every level, is essentially two-fold: inhale, exhale.

21. The row used by Berg is especially poignant in the context of the creation of *Breath-tails*, as the first 5 pitches—D, F, A, C, E—spell out, in subsequent linear trichords, the D minor – F major – A minor harmonic progression used by Franz Schubert in the exposition of the first movement of his String Quartet No. 14 (also known as “Death and the Maiden”).

22. Originally I had planned for the singer to engage in physical activity reflecting and amplifying the content of the poems—in this case, running.

23. The Anapanasati Sutta, or “Breath-Mindfulness Discourse,” provides instructions given by the Buddha on the use of breathing in meditation.

24. Just as the 16 lines of the poem are mirrored symmetrically, the assignment of spoken passages to the string players follows a separate but consistent pattern, namely Cello—Viola—Cello—Viola—Violin 2—Violin 1. In that order, the players are instructed to speak the first six lines of the poem that are enclosed in parentheses (“he trains himself; she discerns; she trains herself; he discerns; he demurs; she protests”). For the four central parenthesized lines of the poem (“mindlessly; mindfully; mindfully; mindlessly”), I’ve retained the basic formulation of Cello—Viola—Violin 2—Violin 1, but now have them cycling in groups of three for each line, so that these central lines are always spoken in unison by three players. With each subsequent line, the trio formation changes, according to the cycling pattern. Finally, the last 6 parenthesized lines (“she protests; he demurs; he discerns; she trains herself; she discerns; he trains himself”) follow a retrograde pattern of Violin 1—Violin 2—Viola—Cello—Viola—Cello. The manipulation of instrumentalists, in this way, generally parallels the form of the text.

25. When I first envisioned *Breathtails*, it was in a more theatrical context, and I had the vocalist ostentatiously marching about in this song.
26. For the significance of these numbers, refer back to #5: *counting breaths*, in this paper.

References

- Christopher Yohmei. 2008. *The Shakuhachi, a Manual for Learning*. Japan: Printed Matter Press.
- Iyengar, B.K.S. 1981. *Light on Pranayama*. London: Unwin.
- Miki, Minoru. 2008. *Composing for Japanese Instruments*, edited by Philip Flavin. Translated by Marty Regan. New York: University of Rochester Press.
- Steiner, Rudolph. 2002. *From Sunspots to Strawberries . . . Answers to Questions* (14 Lectures, Dornoch, June 30–September 24, 1924). Revised translation by Matthew Barton. London: Rudolph Steiner Press.

