Oregon Musician

Sharing ideas about music and the teaching of music

Music and the Power of Metaphor

The Editor's Comments



About the Editor

Diane Baxter, pianist, educator and consultant, is the new editor of Oregon Musician. She is currently Professor of Music at Western Oregon University where she has received the Faculty Honors Award for Outstanding Creativity and the Pastega Award for Excellence in Teaching. Diane teaches studio piano and courses in Ethnomusicology, Performance Anxiety, and Research Methods. Off campus Diane consults and performs far and wide, often giving workshops on doing our best under pressure. "The Science of Artistry: The Fourth String" was published in *Clavier Companion* in Nov/ Dec 2013. She lives, writes, plays and thinks in Brownsville, Oregon.

I think in metaphors all the time. It must be one of the reasons I love music and poetry so much. Even when I'm doing something simple and routine, like jogging on my well-travelled route, I notice things that feed my metaphorical appetite. Recently, while jogging, I found myself pondering the water in the ditches on either side of the road. The water in one ditch is still, not moving, but on the other side of the road the water splits; some goes north, some goes south. That's how it is, all right, life is full of decisions and sometimes we have to be still before we can decide which way to go. It seems that connections through metaphor are what make sense and give meaning to our lives. Metaphors contribute to a wonderful internal web where myriad thoughts find a place to rest and belong. In the Javanese art of wayang kulit, shadow puppetry, the shadows become the reality. The actual puppets are simply the medium. Often in response to hearing a great piece of music, I think "Oh, that's what happens in life" or "That's what should happen in life." The "shadow" of the piece can indeed become the reality.

Recently I have been playing the late Beethoven piano sonatas, Op. 109, 110 and 111. There are profound musical experiences in these pieces that make us better human beings through the very journeys they offer. Beethoven builds an entire movement on theme and variations form. A theme is presented, variations ensue. Isn't this how we live? Something happens to us, we react to it, we may be transformed by it, another possibility unfolds; we build on what has come before and it allows us to go forward. The theme of Op. 109's third movement is simple and beautiful. Beethoven creates a series of intricate and tremendously varied presentations, then brings back that

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exquisite theme at the end. It is as if we have arrived home, but in a changed state. It brings to mind what T.S. Eliot says in the last of *Four Quartets*, "Little Gidding":

We shall not cease from exploration And the end of all our exploring Will be to arrive where we started And know the place for the first time.

Beethoven was a master of fugue as well. He uses a very simple fugue subject in Op. 110, but the glorious complexity that emerges from that simplicity is a profound metaphor for living. We carry on, even though things may become complicated, interwoven, and demanding. The music (and we) are tempered by the fire of the fugue.

In this edition of *The Oregon Musician*, Anita Sullivan's stunning, lyrical essay speaks to the depth of music as metaphor: "... we feel music telling us that yes, we are not just the listeners, we are the instruments too." She says "... music is able to carry me somewhere that I have never been before but that nevertheless seems familiar because it comes from an inner geography that is partly unique, and partly belongs to a rich and complex human tradition." Later she refers to "a geography of the soul." Jill Timmons speaks to the power of metaphor in teaching, how it helps open students to creativity and growth. She writes "Through metaphors, I can teach complex musical concepts and help students to navigate the rocky shoals of creativity, all by connecting to something they already know." She continues "What I glean from my work in music becomes a larger metaphor for my life. The study of music informs us about living in our world." Marjory Lange's thought-provoking perspective on music in poetry is fascinating. She tells us that "Leopold Stokowski asserted that '[as] a painter paints pictures on canvas... musicians paint their pictures on silence.' That is true of poets, as well, who place the sounds of language upon the canvas of silence." Claire Wachter discusses the genesis and content of a fabulous video project in "Behind the Scenes: The Real Virtual Piano Pedagogue." The series of online videos that she has created for pianists and teachers are amazing in their depth of scholarship, accessibility, and brilliant musicianship. They are clever and artful, filled with creative links to imagery (visual metaphors) to enhance the themes. The videos are free to everyone, in keeping with Claire's belief that knowledge is to be shared. Finally, Susan Kline takes us for a metaphorical visit inside the anatomy of the piano, not unlike *The* Magic School Bus! Savor the essays and please send any comments to baxterd@wou.edu. Thank you for reading!

Music and Healing

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by Anita Sullivan



About the Author

Anita Sullivan is a poet, essayist and novelist whose book about the philosophy of piano tuning *The Seventh Dragon: The Riddle of Equal Temperament* won the Western States Book Award for creative nonfiction. Music and the natural world figure strongly in all her writing. Anita has published essays and poems both on and offline, writes regularly for the blog Weekly Hubris (www.weeklyhubris.com), and has recently published a literary fantasy novel. More information about her books can be found on her website www.seventhdragon.com.

I want to begin with a single voice. But not a human voice, rather that of the entire World. Here's how poet Andrew Marvell put it, in his 17th-century English:

> First was the world as one great Cymbal made Where jarring windes to infant Nature plaid. All Music was a solitary sound To hollow rocks and murm'ring Fountains bound

In this opening stanza of his poem "Musick's Empire," Marvell declares that the very first music comes from the natural world; or more specifically, that once upon a time there was no difference between music and the normal sounds made by the natural world. Music, by nature, did not exist apart from nature, it was "bound." Nature was musical; music was natural. This would be some kind of elemental, almost religious, truth.

But Marvell is not speaking factually here, not as a scientist, or a university professor giving a lecture where any minute someone might rise from the audience and say, "Wait a minute, sir, we all know that a waterfall isn't making music, music is an art, invented

by human beings!" Rather, he is expressing a metaphor. You can get away with that kind of thing in a poem, and in fact you are expected to. Marvell is "hot wiring" his way into a very ancient kingdom that all humans share: the kingdom of myth, symbol, and story. And in this kingdom music was surely born.

So, let us bow to the audience member and move from nature's music to the kind we are more familiar with, involving sounds deliberately crafted and performed by human voices and instruments.

For a person in the audience, a piece of music performed and played inside a building may be just as mythical, just as overwhelming as if she were out in Marvell's natural world listening to orchestrations of thundering cataracts and howling winds. Metaphor can divert and clarify this emotional "attack" by essentially reconstructing the music in another, gentler form.

Poet Emily Fragos does this in a poem "Bach Fugue," in which she expresses her response to an organ performance through a set of stream-of-consciousness images that the music called up for her. Her poem is not a strictly private, therapeutic exercise. By setting one art, one medium, up beside another, she hopes to open up a metaphorical coping strategy for other listeners. By way of a call and response between the words and the music that evoked them, a poem can provide a "scapegoat effect" to a listener overwhelmed by the sheer power and beauty of the sounds. Such a poem can also enrich and enlarge any similar listening experience by showing a way to transfer it from the realm of the open ocean, so to speak, into a quieter, more articulate tidepool.

Each of the lines in Fragos' ten-line poem begins by going back to the title, and thus becomes a metaphorical re-statement of the music she is hearing. It would be easy to replace "Bach Fugue" with "Music."

Frees the horses from their mechanical bolts Keeps the fire from spreading to the sleepers' floor

she begins, and ends with these final lines:

... Catches the jumpers
With invisible nets from their sad, night bridges;
Finds all those who have been lost to you. The great
Chords, once struck, can never decay.

The last line takes us right back to Marvell's "great Cymbal." Over the centuries all humans have known these chords, this music; we feel music telling us that yes, we are not just the listeners, we are the instruments too.

This idea is clearly expressed in the opening line of a poem "Dulcimer" by James Still:

The dulcimer's three strings are the heart's cords.

And in his beautiful poem "Wrestling the Angel," poet John Witte briefly remembers Mstislav Rostropovich playing a Bach cello suite:

And there head bent struggled he alone in the soaring transept's half-light wrapped the cello in his arms clasped the neck scuffed and grimaced as if thrashed by wings

In the live performance Witte attended, the listener could hear the cellist's actual "huffs and grunts" as he struggled to coax music from his bulky instrument, "spending himself in the surging/crescendo gasping," Without the need to say "Jacob" or "angel" or "wrestling," the poet deftly transforms the performance into the Biblical tale. If Rostropovich is Jacob, then the cello is both the angel and the music. One metaphor rises out of another, forming together a third thing, a redemptive whole.

The idea of metaphor is that there are two things involved. And the two things somehow "play off" against one another, forming a new whole that is more than — or at least very different from — either of the two originals. Music lends itself well to metaphor because it expresses itself differently through each instrument (even if it's just a hubcap, a shell, or a gap between your thumbs and a blade of grass). We come to music predisposed, you might say, to wait for the instrument(s) to speak.

One vital intermediary instrument for music is the entire memory bank of the mind, soul and imagination of each member of the audience. This memory bank can sometimes join fully with a performance as the "third thing" I spoke about above. For me, music is enjoyable only when this happens, when the music is able to carry me somewhere that I have never been before but that nevertheless seems familiar because it comes from an inner geography that is partly unique, and partly belongs to a rich and complex human tradition.

A recent example of that experience happened when I attended a "Live from the Met" film showing of Bizet's opera *The Pearl Fishers*. Normally I would expect to enjoy such an event as simply entertainment, a story with beautiful music attached.

The story is set in Ceylon (Sri Lanka), the island off the coast of South India, in a village of pearl fishermen. I have no idea how accurate Bizet tried to be in his depiction of this society, doubtless it was highly romanticized. But by making the entire village of pearl divers into the chorus of the opera, in effect pulling the "background noise" into a foreground role equal to that of the three lead singers, he shifted the dramatic level of the story into a mode that might resemble ancient Greek tragedy. Adding to this impres-

sion, the music has a relentless, exotic, chant-like quality both stimulating and soothing at the same time, that gives the listener an impression of being present at a ceremony rather than at a concert.

Throughout the opera almost everything takes place outdoors, in close touch with the elements of sun, wind and ocean. But I believe that for Bizet, this was not an artistic decoration, a kind of convenient extension of plot and setting into a larger space — but that he was instinctively creating something fuller, larger and more coherent, as if the sounds were truly "painting" his own lavish vision of paradise.

In any case, I was completely transported into a whole new imaginary landscape — but not the way it would be in a dream, insubstantial and hard to hold onto — but rather a landscape that the Sufi mystics, and shamanic storytellers from all over the world across eons have regarded as a real place, outside normal space and time. Some have called this place "utopia," which translates into "nowhere," but means a different kind of somewhere — a geography of the soul.

For a period of several weeks afterwards, the music became a part of my life: it showed up at odd times during the day, and the last thing before I went to sleep at night, like a musical accompaniment to my actions. Though the evocative chants and arias have lost their original intensity, I like to think they have added emotional and visionary heft to my private imaginary treasure house.

This is what I would call a true metaphorical experience, made directly and magically possible through music. I like to think that, thanks to Bizet, I actually brought back a pearl from that mythical land of heart-achingly beautiful and constant mystery.

Meta Metaphors

by Dr. Jill Timmons



About the Author

Jill Timmons, professor emerita at Linfield College, performs internationally as a solo and ensemble artist and has recorded on the Laurel, Centaur, and Capstone labels. She is the author of: *The Musician's Journey: Crafting Your Vision and Plan* (Oxford University Press, March 2013). You can find her in her Lake Oswego studio teaching, practicing, or writing her next book!

Metaphors are something we use everyday in our speech. If I want to make a point of clarification or enhance the description of something, a metaphor can be useful. Essentially, it joins two things that are seemingly unrelated and connects them through an implicit commonality. Often, however, their shared relationship is far from obvious.

In the world of art, metaphors are vital, lending nuance and depth to our understanding of things that are often ephemeral. As educators, metaphors can offer us a kind of short cut to conveying information. Through metaphors, I can teach complex musical concepts and help students to navigate the rocky shoals of creativity, all by connecting to something they already know. A day doesn't go by that I don't utilize the power of metaphor.

Metaphors work well in the instructional world. That's something to which all of us can subscribe. But there is another realm that metaphors can serve. The *meta metaphor* is what interests me these days. It's self-referential. It's metaphors about metaphors. Stay with me on this. Here's how it is useful to us as artists and teachers. What I glean from my work in music becomes a larger metaphor for my life. The study of music informs us about living in our world.

So how does this work? Let's focus on one key aspect of what we do as musicians — practice. It's the essential task if you want to play an instrument. As I remind my students, all the brilliance, imagination, and insight alone will not bring you to a fine performance. My teacher Gyorgy Sebok use to say, "Sometimes we must chop wood and carry water." That's my favorite metaphor for practicing and I use it with my students on

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a daily basis. Practice also requires sophisticated problem solving, carefully planned drill, scholarly research, psychological wisdom, awareness of the non-linear world, patience, a hearty constitution and a strong work ethic, humility, and on occasion, humor — all in service to something greater than oneself.

Here's what I know about practicing. It is essentially one thing: rehearsing effective solutions to technical and musical problems. If I am not continually aware of this truth, I will wander into the woods of distraction, unintentionally practice errors (so that I *really* have them), or simply engage in what I call "Piano P.E." (moving at the piano while the brain is engaged elsewhere).

If I rehearse well thought out solutions, then I begin to discover all manner of mysteries and paradoxes. For instance, I may not practice a work from beginning to end but rather from difficult to easy. Think of those codas in the Chopin Ballades! Practice cells become useful tools for organizing what is essentially a non-linear task. Those problems I encounter must first have the right solution: no point in practicing a difficult passage if you don't know how to play it with ease and accuracy. Sometimes the solution can elude us. I send my students to the usual suspects: fingering choices, unconscious tension, the relationship between left and right hand (which hand needs most of the attention in a given passage?), hand and eye coordination (are you looking in the right place?), and so forth.

Once I am well ensconced in effective practice strategies I am then met with more ephemeral challenges. How do I sustain daily practicing? Sometimes we have glorious days where everything comes together. Those are easy. But what about those days when we struggle with fluency, doubtful of our abilities? Perhaps we encounter frustration and boredom with the whole process. That's where a strong work ethic and patience can sustain us. One of my other Hungarian teachers, Béla Nagy, suggested that we simply get ourselves to the piano bench each day and that some days will inevitably be tiresome, unproductive, and even boring. He was right, of course. Daily effective practice, however, is the gateway to a fluent performance. The key is to first show up!

Psychological wisdom is essential because when we are practicing we are being our own best teacher. I often ask my students what they would think if I berated them, bullied them, or ignored them. And yet, when we are practicing, we can, out of frustration, fall prey to destructive self-talk: "I'll never learn this piece, I am not like other pianists who find it easy, I have no talent, I can't believe I played those wrong notes," ad infinitum. Needless to say, progress will elude you with a bad *inner teacher*.

In the larger scheme of things, practicing requires two overarching traits that I believe are non-negotiable. If you don't have them, your life as a musician will be self-limiting. They are humility and humor. The first connects you to the numinous and the other sustains you. Humility opens the door to a deeper understanding of music and its infinite power. We have the opportunity to walk in the footsteps of luminaries such as Mozart. As the vessel for great music, we are, in a sense, challenged to continually stretch beyond

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our own limitations. Humor, on the other hand, helps to create a relaxed and open environment for learning. When I am giving a workshop or presentation, I am always happy when there is laughter because I know in that moment we are all deeply connected. Active learning is underway.

There is much more to say about practicing per se, perhaps for another article. As a powerful *meta-metaphor*, however, the art of practicing can bring me to new discoveries about my work and my life. Sometimes I need to think outside the box for solutions. Perhaps through a non-linear event, chaos enters my life and I am thrown off my carefully planned trajectory, or on occasion I must find ways to sustain myself through life's inevitable challenges. I may even need to pan back and see the humor in life, especially about myself. In turning to the vast world of practicing, I can glean essentials tools for a thriving life. I can use well thought out strategies, acquire patience in my own process, adopt positive self-talk, show up and stay the course, find new wisdom, and revel in connecting with beauty. Music study offers us this and more. And from this *meta* connection I can discover fresh ways to expand my work as an educator and artist, sharing with others what wisdom has come my way.

by Marjory Lange



About the Author

Marjory Lange is a professor of English and Humanities at Western Oregon University, violinist and violist with various local ensembles, and equally enthusiastic about both worlds. She has published a book, Telling Tears in the English Renaissance, several articles on various topics in medieval monasticism and hagiography. In October 2015, she played a full recital on violin, viola, and vielle — early music is the newest passion added to the others. Her first job after her Bachelor's in Music Performance was as a New York cabby; since her PhD in English with a minor in History, she has happily been a teacher, scholar, musician, and writer.

The man that hath no music in himself,
Nor is not moved with concord of sweet sounds,
Is fit for treasons, stratagems and spoils;
The motions of his spirit are dull as night
And his affections dark as Erebus:
Let no such man be trusted. Mark the music.

(Shakespeare.

The Merchant of Venice, 5.1.91-7)

"Mark the music," orders Lorenzo. His own music is poetry, euphoniously rich in 'm' sounds and assonances, alluding to Hell, and suggesting that a person who has no inner music cannot be trusted for anything. From words and rhythm, and silence, poets shape meaning — their music. Like Lorenzo, the imprisoned Richard II rhythmically explores music as metaphor for human lives — without rhythm and harmonic proportion, a life is sour:

Ha, ha! keep time: how sour sweet music is, When time is broke and no proportion kept! So is it in the music of men's lives.

As a literature professor, also a violinist and violist, I often attend to the music in poetry. Without its rhythm, melodies, and harmony, poetry would be, at best, trimly designed prose. I imagine most poets might agree with Ani di Franco: "I don't like my language watered down/I don't like my edges rounded off." Good poetry sounds as satisfying as it looks. It sings in silence. W. H. Auden, in his tribute to W. B. Yeats, wrote:

Mad Ireland hurt you into poetry.

Now Ireland has her madness and her weather still,
For poetry makes nothing happen: it survives
In the valley of its making where executives
Would never want to tamper, flows on south
From ranches of isolation and the busy griefs,
Raw towns that we believe and die in; it survives,
A way of happening, a mouth.

("In Memory of W.B. Yeats," italics mine)

"... Poetry makes nothing happen:" its enormous, immeasurable gift, what it shares with music, perhaps the manner in which poetry and music are most inextricably related — is this ability to *make* "nothing" happen. Leopold Stokowski asserted that "[as] a painter paints pictures on canvas ... musicians paint their pictures on silence." That is true of poets, as well, who place the sounds of language upon the canvas of silence. Their very critical terminology is musical: poetry's main genre is 'lyric;' the elements of poems include rhythm, melody, cadence, development, repetition and variation.

The iconic Emily Dickinson mastered poetry's music as well as she did so many other facets of her art. Even her shorter lyrics resound with song.

Tell all the truth but tell it slant –
Success in Circuit lies
Too bright for our infirm Delight
The Truth's superb surprise
As Lightning to the Children eased
With explanation kind
The Truth must dazzle gradually
Or every man be blind –

The music in this short lyric starts with alliteration, strongest in the first line, and then fading steadily out of the picture. The four emphatic 't's in line 1, then the sliding 's's in lines two and four, give way to more subtle assonance (most notably the neutral 'a' in 'dazzle,' 'gradually,' and 'man') as the poem's point — not sudden, but slow exposure to truth is best — materializes. "Blind" closes the poem firmly, its vowel echoing both bright and 'lightning,' with which it contrasts: brilliant truth — like lightning — blinds: measured illumination ("dazzle gradually") is better. As so often, Dickinson's diction provides multiple meanings: "Circuit" connotes both going around indirectly (circuitous motion) and the closing of such motion (like an electrical circuit — which, itself, is metaphor). "Gradual" includes both a slow pace and processing by degrees (as in music). "Delight"

and "dazzle" stand out against each other: our ability to be delighted, to love, "Truth" is ill and weak, so it must illumine gradually if we are to see it at all. The simile comparing our need for gradual dazzle to children needing kind explanations of the awe and fear of lightning stands out for its lack of tonal resonance to the rest of the lyric. The resonance of the poem is finally accentuated by the lack of punctuation or stanza breaks. Dickinson's care for the timbre of her diction can be seen in the manuscript of this poem: her holograph offers two alternatives — 'bright' or 'bold,' and 'moderately' in place of 'gradually.' In each case the word she apparently preferred is the one that rings true in the musical line as well as offering the wider metaphoric range.

"Tell all the Truth" is written in common hymn meter, 86.86, Dickinson's preferred rhythmic pattern. (Her poems were nearly ruined for me for a time when some well-meaning teacher pointed out they can all be sung to the tune of "Yellow Rose of Texas," a sad fate.) In what is arguably her most famous poem, "Because I could not stop for Death," this jolly, rollicking metric pattern challenges the text's seriousness. Here are the first and last stanzas:

Because I could not stop for Death – He kindly stopped for me The Carriage held but just Ourselves – And Immortality. Since then – 'tis Centuries – and yet Feels shorter than the Day I first surmised the Horses' Heads Were toward Eternity –

Dickinson's choices here are significantly different than in "Tell all the Truth." No pattern of alliteration or assonance emerges to release the dissonance between meter and meaning. I think it no accident that, in his magnificent setting of her poems, Aaron Copland largely ignored her meter, subsuming it into his own structural cadence while concentrating on her vital words.

Emily Dickinson was very well read. Among the poets she treasured was Alfred, Lord Tennyson, whose practices are much more typical of their shared era than hers. For elegant consonance between musical value and meaning, few poems can surpass seven lines from the "Choric Song" from Tennyson's *The Lotos Eaters* whose sheer beauty of language *contrasts* with its situational irony and pulls out all the stops in favor of ironic use of music in language:

There is sweet music here that softer falls
Than petals from blown roses on the grass,
Or night-dews on still waters between walls
Of shadowy granite, in a gleaming pass;
Music that gentlier on the spirit lies,
Than tir'd eyelids upon tir'd eyes;
Music that brings sweet sleep down from the blissful skies.

Alliteration, assonance, rhyme, rhythm, and diction blend to create a supremely attractive impression. The hard 'g' of granite and gleaming melts into the softer 'gentlier.' The last lines' double alliteration (brings/blissful; sweet sleep/skies) caps the whole. Here is music so soft that a rose petal or dew upon still water would fall harder; music more restful than tired eyelids upon tired eyes — what could be more lovely? It is utterly delicious . . . yet, in context of the whole poem, this image is presented with complete irony. Tennyson recounts how Odysseus and his men have landed in the land of the Lotos Eaters, who offer their visitors poppy with its promise of delectable languor and drowsiness, a delicious temptation to indolence for weary warriors. Odysseus must rouse them from their gentle, musical sleep if they are ever to reach Ithaca and bring their epic journey to its close. This relaxing musical sweetness significantly dramatizes the situational irony.

At the other extreme of poetic music, there is e. e. cummings' "r-p-o-p-h-e-s-s-a-g-r," which some critics maintain is a poetic failure. It certainly cannot be performed — not even read aloud. By bending the very essence of language to reassemble it into a purely visual experience, cummings challenges poetic convention. Its music is atonal, arrhythmic, patterned by the motion of the jumping grasshopper that, only upon arrival becomes fully itself. And yet "r-p-o-p-h-e-s-s-a-g-r" asks of its readers much the same openness and flexibility that John Cage exacts of the audience who listens to 4'33". Cage claimed 4'33" might be his most significant work because it epitomizes the idea that any sounds might constitute music. The audience at its performance hears only the circumstantial, ambient noises, perhaps the hum of HVAC or their neighbor's borborygmi or snores. cummings' poem is far less momentous, but in prodding language past its ability to communicate he asks readers to observe a moment's silence as they puzzle out a pattern that has little or nothing to do with meaning, melody, or rhythm. He creates an image in words, as Cage offers his image in silence.

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The hop-along respellings of the word 'grasshopper,' the uneven number of parentheses, the sporadic punctuation, and the mingling of two phrases coalesce to make literal non-sense, even though, as a gestalt, they do become rearrangingly 'grasshopper.'

In 1951, Langston Hughes captured the looming racial struggle in his brief, intense poem, "Harlem." As a piece of poetic music, it is very nearly perfect.

Harlem

What happens to a dream deferred?

Does it dry up
like a raisin in the sun?
Or fester like a sore —
And then run?
Does it stink like rotten meat?
Or crust and sugar over —
like a syrupy sweet?

Maybe it just sags like a heavy load.

Or does it explode?

Just about everyone is familiar with the third line; in its context it is musically pivotal. Following an alliteration of three consecutive 'd's, 'dream,' deferred,' and 'dry,' Hughes establishes a pattern of similes employing alternating 'r' and 's': "raisin in the sun," "sore . . . then run," and "stink . . . rotten." The only remaining 'r's are in 'crust' and 'syrupy,' so that the last three lines have no 'roll' to them at all. Four similes, dry, fester, crust, and sag . . . followed by — what readers must have hoped was a metaphor — direct statement. In retrospect, the prophetic menace in the italicized last line is evident: in 1951, when Hughes' poetry was in no way 'mainstream,' it must have seemed futile frustration. It is separated from the descending series of possible outcomes by space, set apart by typography, and musically isolated by sounding the long 'o' that rhymes with and undermines the two previous lines' hopeless resignation . . . the only "Maybe." Having so many lines start with either "Does" or "Or" cannot match the musical impact of that final word.

Hughes' meter is rappish — strong accents in varying patterns driving toward a fierce conclusion, coupled with imperfect, incomplete rhyme patterns. Each of his similes portrays a successively more drastic situation. A raisin is *already* a dried grape — so that a dried raisin is something truly wasted. The festering sore that opens to let pus run out

heralds the final violent explosion of the dream deferred; the smell of rotten meat is pervasive and hard to escape; it partners with the syrupy sweet that has spoiled into crust — two extremes of food ignored — or, better, *put off* — too long. "Maybe" the dream deferred "just" sags — the rhythm's shoulders sag with the colorlessness of this final image. Right through the end, the diction is so polite, the rhythm so controlled, the tone so casual, the total effect so suspiciously gentle, that the last line truly does explode.

Thus, as Lorenzo insisted: "The man that hath no music in himself . . . /ls fit for treasons, stratagems and spoils." Poetry is incompletely read without its musical component. Words and punctuation are the poet's notes and rests. Our visual-reading age loses as much by ignoring the music in our poetry as we would if we only read the scores of our music without the voices and instruments to give the notes life. As Elie Wiesel put it: "Music does not replace words; it gives tone to the words."

by Claire Wachter



About the Author

Pianist Claire Wachter has performed in the world's most prestigious venues, including Steinway Hall in New York and the National Recital Hall in Taiwan. Wachter and pianist Dean Kramer were the first duo-pianists to perform in the Qingdao Grand Hall in China. Wachter has appeared with such distinguished conductors as Marin Alsop, Helmuth Rilling and Mei-An Chen. As a chamber player she has performed with members of the New York, Los Angeles, Philadelphia and Chicago Symphony Orchestras. Wachter is an Associate Professor at the University of Oregon and in 2013 was the recipient of a major award from the Oregon Community Foundation to create *The Virtual* Piano Pedagogue video master course series. (virtualpianopedagogue.com) Claire Wachter is also a Steinway Artist.

My interest in video goes back to 1981 when I was a graduate music student at the University of Texas at Austin. I decided to take a few courses in the Radio/Television/Film (RTF) school. My professor, Robert Foshko, was the Emmy-award winning producer of The Man From UNCLETV series, one of the first spy TV shows. Foshko asked us to look at videotapes of M*A*S*H, the dark comedy about a mobile army surgical hospital starring Alan Alda. This series was famously shot in film style with one camera. Foshko asked us to watch the show without the sound so that we could study the one-camera shots. Among other opportunities, he arranged for his students to observe the filming of *Austin City Limits*, the famous live music show produced in Austin and carried nationally by PBS. We were told to watch the director and learn how the shots were put together to create a professional production of a live music show. As a classical musician I found it strange that the person who directed that particular episode of Austin City Limits did not read music. More importantly, I was pondering how to promote classical music on television.

Enter Paul Olefsky (1926 — 2013), a cellist on the UT/Austin faculty who had won the Naumburg Competition in 1948 and had studied with Pablo Casals. He was a very engaging man in his mid-50's who stood only slightly taller than his cello. He agreed to be the "talent" for a classical music video of the Bach Cello Suite No. 1

in G Major. Olefsky owned many superb instruments. He played his Amati cello for the shoot but we used his Stradivarius cello as a prop -- probably the most expensive prop ever used in a UT Austin RTF shoot! A plaster bust of Olefsky himself was used for additional shots. He made jokes about how very flattering the plaster bust was because it had not gained any weight. This live performance was a three-camera shoot which I directed from a control booth. I had planned the shots as much as possible using the score. As the director (albeit a very inexperienced one) I would say "Camera One — close up on cellist's left hand" or "Camera Two — zoom in on face." It really was like being a conductor of an orchestra, but instead of creating an auditory experience I was creating an auditory AND a visual experience in real time. The shots were timed to change with the phrases in the music. We did not edit anything. This was it and it had to be right the first time. It was not easy trying to vary the shots of one man playing Bach on the cello. I think we had a lot of close-ups of the famous Amati.

Later I worked on a video where the "talent" (the actor) didn't show up and I was asked to be the actor for the scene. This was the first time I had ever read from a teleprompter. I was about as animated as wood. I literally froze when the camera came on. I remember the director saying "OK, find someone else ASAP!" I learned a valuable lesson that day — acting, even reading a teleprompter, is a lot more difficult than it looks. Although I loved the RTF experience ultimately I missed playing the piano. I returned to the music department full time to pursue my doctoral degree in piano performance, but I continued to think about how video could be used to promote classical music. In 1980 we didn't have YouTube or the internet — just MTV, which did not play classical music.

Fast forward to 2013: Technology caught up with my dreams and inspirations! We have HD video, we have YouTube, we have the internet, smartphones, ipads, laptops. It became obvious that online videos could reach many more people than live concerts and lectures. I had been giving lectures, recitals and presentations at conferences and universities in the U.S. and internationally for many years. I decided to use these lecture-recitals as the basis for creating professional videos. The idea for the Virtual Piano Pedagogue (VPP) was born!

I approached the Oregon Community Foundation (OCF) for financial support to make these videos. Many wonderful letters of support from enthusiastic teachers around the state accompanied my grant request. Fortunately I received a generous grant from OCF to do this project. I also had in-kind donations from several other organizations. These people contributed to the project gratis. Without their support and OCF's grant the VPP might never have become a reality.

There are three videos, totaling over three hours running time. "The Art of the Phrase," "The Essence of Chopin" and "The Genius of Domenico Scarlatti." These videos took about nine months to produce. A crew handled all aspects of the production: lighting, camera, teleprompter, make-up, sound recording for the voice, audio recording for the piano--and, of course, tuning for the pianos. The director for these videos handled

the editing, produced the video montages, and drew the still images, such as the dream image of Chopin and "Edgar," the slightly animated Raven.

My early experience in video production had been quite useful after all. I learned to read the teleprompter more easily and to ramp up the energy for the camera and the viewing audience. I gradually became more comfortable in front of the camera, even though I had to learn to speak at a much slower tempo and to pronounce words with almost exaggerated clarity (at least, for someone who grew up in Maryland, where people pronounce "Baltimore" with barely two syllables.) I began to have fun with the Scarlatti videos, sometimes going "off-script." My alert videographer was quick to catch these spontaneous moments with a special camera at the tail of the piano. She told me: "when you ad-lib look in this direction." This was sometimes really funny. We left *some* of these in the final cut (See Scarlatti Video 6).

We used two different filming strategies for the three videos. "The Art of the Phrase" was shot in separate segments in Beall Hall, first music, then script. "The Essence of Chopin" had been presented as a lecture-recital with Dean Kramer at the MTNA Pedagogy Saturday in 2012 in New York City. Many people told us that this lecture-performance would make a great video. Three years later we had the incredible opportunity to make the Chopin video series on the Hult Center's Silva Concert Hall stage in Eugene. We had the use of the facility for only one day so the three-camera shoot and audio recording were done on site. That was a difficult but rewarding day. My first clue that this might be a long, long day: I had just finished a perfect take of the Chopin Prelude we call the "Teardrop" (Db major) when our outstanding recording engineer, Billy Barnett (Gungho Studios), came running down from his control booth asking me whether I liked that take.

"Yes, a lot — why?"

"One of the microphones stopped working while you were playing." "!!!???!!!!"

I had to play that piece at least six more times during the day.

Throughout the day, the wonderful piano tuner Terry Lambert waited in the Hult Parking Garage "just in case" we needed him (and we did!) The intensity of the stage lighting made the pianos go out of tune in only a few hours. Then our sound system for recording voice mysteriously stopped working with the Hult Center system. Fortunately our sound recordist had an extra unit to replace it. What did I learn? In video, in real time, always expect the unexpected and have back-up ready at all times.

For "The Genius of Domenico Scarlatti" we wanted a more venerable and old-world look to the video, so we booked the Gerlinger Lounge on the UO campus, a National Historic Site AND where a scene in *Animal House* was filmed. We had expected a nice quiet Sunday afternoon during holiday break on campus. But this day was a disaster, a total write-off. We had not considered the possible sound issues with single pane windows. If even one person walked by the outside of the building our microphones picked up the sound. When a bus idled across the street for 15 minutes we had to stop the filming. Every

time the old radiator started up the racket stopped filming for several minutes. Then the elevator broke and all the heavy video equipment had to be carried downstairs by hand.

The difficulty of coordinating every aspect of these video shoots gave me new respect for the countless hours of work and struggle represented by a film that lasts a couple of hours. Finally the VPP website and YouTubes were officially launched on June 21, 2015 at OMTA's state conference and are now available to anyone who wishes to access them.

I began the video productions with "The Art of the Phrase" because I was interested in a concept video. I wanted to show how beautiful phrasing produces musicality. When we understand how the music is organized into phrases we can interpret and perform music at a much higher level. Artur Schnabel's system of Roman numerals that determines phrase lengths is an extremely powerful way to organize music from "form to details," to quote Theodore Leschetizky — Schnabel's teacher. This series begins with the easiest piece in all of the videos, the Clementi Sonatina in C Major, Op. 36, No. 3. (see Video 1). In the Mozart Sonata in G Major, K. 283 (Video 2) I use the metaphor of an opera scene to teach character and style. Mozart seemed to be composing opera and portraying human beings with all their virtues and flaws whether the final piece turned out to be a piano sonata, a piano concerto, chamber music or an actual opera. In K. 283 I relate the delightful energy of the changing phrase patterns to an imaginary opera. Very fun and also very illuminating!

After the Schnabel system of organizing measures into phrases is introduced, we move on to organize phrases into larger musical structures (Video 3). In Video 4 I discuss the classic short-short-long phrase pattern. We can apply this concept very easily in hundreds of works. To illustrate the classic phrase pattern I enlist the help of "Edgar" the Raven, and I recite the beginning of Poe's famous poem "The Raven." I explore the fascinating effect of the agogic accent in phrasing in Video 5. In Video 6 the Schubert Allegretto in C minor is a perfect piece for the study of agogic accents.

It is very interesting to see how a composer's style is expressed by their characteristic phrase structures, use of agogic accents and dynamics. In Video 9 we see how Debussy often places the agogic accent at the very end of the phrase to allow the music to breathe. In Video 10 I discuss the characteristic phrasing in Rachmaninoff's music and in his playing on the masterful recordings he left.

The last video functions as a short review of the composers and their contribution to the art of phrasing. The final quote is from Rachmaninoff who said: "An artistic interpretation is impossible if the pianist does not know the art of phrasing." I love this quote and Rachmaninoff's words are the perfect conclusion for "The Art of the Phrase" videos.

"The Essence of Chopin" is centered on Chopin as a radical innovator. Very few scholars discuss Chopin in this way. Dean and I wanted to reveal this aspect of Chopin's piano music by focusing on his unique language of musical expression, accentuation as well as his very sophisticated new forms of composition. And, of course to ask the big question "What is rubato in Chopin?" We wanted to discover new ways to get to the soul

of Chopin. (See Video 1 for the secret Polish word.) We demonstrate how Chopin transformed the bel canto style of singing into what we call "Bel Canto Pianism" (Video 6). We use the term "hybrid" to describe how Chopin created new forms of composition (Videos 7 and 8). The Fantasie-Impromptu (Video 9) is really important for understanding thematic transformation. In my own studies with fine teachers I only heard the term thematic transformation used in reference to the music of Liszt, never Chopin. From my personal point of view, this research transformed my own understanding, playing and teaching of Chopin's works. Besides, it's great to hear Judy Garland sing the middle section of the Fantasie-Impromptu as a popular song. And for those of you who watched the video and saw me cover Dean's eyes while he played — yes, he really was playing the piano without looking at the keys. Try this at home (maybe not with Dean . . .)

Another important theme in these videos is about Chopin's life. My videographer made the "Teardrop" Prelude (aka the "Raindrop" Prelude) into a 5-minute YouTube movie. This video can be viewed separately or at the end of Video 10. This is one of the very few pieces where we have specific information from George Sand and from Chopin himself about the dire circumstances in which he composed this masterpiece. When we learn about the circumstances of Chopin's life when he was creating this masterpiece we can come to a deeper understanding of the "funeral" section in the middle of this prelude.

In "The Genius of Domenico Scarlatti" I wanted to open people's minds about Scarlatti. I have visited several places in the world where I found teachers who look down on Scarlatti's music — in some places actually forbidding the students to play his music! (See Video 6, The Scarlatti Prejudice — my video soapbox on this issue.) These teachers often don't understand what makes Scarlatti's music great and exciting and very idiomatic for the piano. Some people might not know that Scarlatti had access to the new instrument called "forte-piano" in all the royal palaces and residences. In many ways, he was the first great piano composer.

In many of his sonatas, Scarlatti's style is not really "Baroque." The extremely strong Spanish influence in his sonatas makes this music much more intense and passionate than the music of his contemporaries. Much of the music is descriptive and evocative. The beginning of the Sonata in A major, K.212, for example (Video 2 and Video 6) sounds just like a two-part invention but by the development section we have been magically transported to Spain. The music sounds like something from Bizet's Carmen. In this music we can imagine the matador facing the bull in the arena and that is exactly the film clip that my videographer chose for the video.

What was Scarlatti's life like? I wanted to explore Scarlatti's life visually as much as possible because the information on him is somewhat limited. I asked my videographer to include pictures of the palaces at La Granja and Aranjuez (Video 4) and the Escorial (Video 5) as part of a visual and musical biography of Scarlatti's life. One theme that no one else has explored is a connection between specific sonatas and the events in Scarlatti's own life, not necessarily the life of his patroness, Queen Maria Barbara.

In "The Seasons of Life" Fall and Winter (Video 5) I play and discuss only two sonatas, K.87 and K.126. Many pianists and classical music lovers are familiar with K. 87 but almost no one knows the profoundly moving K.126. This is the only sonata by Scarlatti marked "mano sola" (for one hand alone at the beginning). This is one of the most heartbreaking sonatas ever written. It is very possible that Scarlatti wrote this sonata after his first wife died. We hear grief in this music.

Many of the videos in this set use image and metaphor to deepen our understanding of the music, empower our interpretation, and guide our choices for sound production, articulation and dynamic contrasts since these are not marked by Scarlatti. For example, in K.27 (Video 1) I use the metaphor of a "flower that opens and blossoms" when describing how the music breaks free of a repeated sound pattern. My videographer shows a beautiful flower opening. In K. 487 (Video 4) I speak of the royal pageantry and the fireworks in the summer on the Tagus river. Scarlatti writes a glissando at the end of this sonata and we use a film clip of a fireworks display to illustrate these pyrotechnics. In K. 454 (Video 4) the flowing arpeggios suggest the stream-fed fountains at the Spanish palace in La Granja that rivaled the French fountains in Versailles. When we play this music we can imagine fountains of beautiful water — it's really one of the first examples of musical impressionism. If you watch the end of this YouTube you will see a transformation — I become "the Queen" . . . though just for a few seconds.

Originally I planned the repertoire for Oregon piano teachers and their students to use for their syllabus exams, festivals and recitals. I wanted to offer the opportunity for continuing education in piano pedagogy for all piano teachers in Oregon. The videos have been used at OMTA district meetings — always a good backup if a district has a cancellation from a presenter!

I want the information in these videos to be free for everyone. I truly believe that knowledge is to be shared. I noticed that an interesting thing is happening — teachers are sending the videos to their friends outside of Oregon and their friends are sharing the videos with other friends. The videos have been viewed more than 5,500 times in more than 60 countries worldwide in less than a year. When I check the Google Metrics it makes me very happy to see that Oregon has the most views — currently at over 85 hours. Overall the U.S. has the most views, with Japan next. A pianist/teacher in South America has already translated the "The Essence of Chopin" videos into Spanish.



For the future, these videos will be translated into other languages and with continued funding I am planning to produce many more videos. There are scripts ready for production right now on the music of Bach, Beethoven, Schumann and other composers. I have received commitments from several outstanding pianists/teachers in Oregon to make videos on the music of German, French and Russian composers. Three renowned pianists/teachers who live outside of Oregon are enthusiastic about the VPP project and are ready to travel to Oregon to produce videos on the music of Mozart, Brahms and selected American composers. As the technology continues to advance, the next cycle of videos will be produced in the new ultra-HD 4K that is becoming standard in the video world.

We have great music, incredible technology and the means to being knowledge to everyone. What an exciting time!

The Unseen Artist

The Unseen Revealed, Part 3:

Where a less unseen area is described by Susan Kline, Registered Piano Technician



About the Author

Susan Kline, a piano technician living near Corvallis, studied at Oberlin and at UT/ Austin. She has a Masters degree in applied cello. She played in the Hamilton Philharmonic (Ontario), then did two sabbatical replacement jobs on the Canadian prairies. In 1978, she attended George Brown College's Piano Technology course in Toronto. After 12 years of sweaty piano work in Stockton, California, she happily moved to Philomath, Oregon. She tunes for most concerts and festivals in the area. She has written a series of articles for *Piano Technicians Journal*.

This issue's unifying principle is "Music as Metaphor." Trying to invent a metaphor related to music, I eventually came up with: "Music is a map of the human mind. You can wander in it for a lifetime and never reach the end of it."

Even if you are wandering through the piano repertory only, learning selected pieces as you go, you will not explore them all in a lifetime! There are, however, a finite number of parts in a grand piano, though more of them than one would suspect.

And here is a photograph of where I propose to wander today.



Steinway D

Now that we've investigated both the keys and the action stack of a grand piano, it's time to consider what's under the lid. You can look inside your own grand pianos quite easily. First, check the left side of your grand piano's lid, and be sure that both hinge pins are in place. Remove whatever you have put onto the lid (and I know how handy this horizontal surface is), and face the bent side of the piano near the long hinge. Use both hands to lift the lid, then brace one arm to hold up the lid while raising the stick and putting it into the appropriate cup or hole with the other hand. Do not lift the lid by dragging the stick along its underside (yes, people do that — but they shouldn't.) A hint for Steinways: there are two sticks, the long one and the short one. The long stick goes into the square hole, and the short stick goes into the round hole. You can put the long stick into the round hole and the lid doesn't fall down, but it looks very silly.

Lid Prop Holes

Several times I've seen well-dressed piano technicians (the suit and tie kind) who put the lid onto the long stick, and then turn out the short stick and hang their suit coats on it. "Steinway does this for us . . . "



Short Stick

If you have a shiny black piano with a mirror-like finish, the lid will be heavy, because of the very dense composite it is made of, which keeps it flat so that the reflections in it aren't distorted. If you have an aching back or shoulder problems, let someone else lift it, especially if you have a long piano. Even I have had to ask for help a few times to raise the lid of a shiny black nine foot Yamaha.

Next, remove the music desk. Most of them slide along the little supports on each side, so they can be pulled forward like a drawer. A few grands, mostly the smaller ones, have music desks which come out by lifting them straight up. A very few of these also have small screws which need to be removed first. Some grands (like Steinway M's and L's) have a little notch in one of the supports. You slide the desk along while pulling upward slightly, till it comes free at the notch, so it then can be lifted out.

And there, revealed, are the strings and everything they need to stay at tension so they can make sounds, plus the dampers so they can stop making sounds.

First, understand that the strings are at such a high tension that the cast iron plate (also called the harp) is needed to resist over 20 tons of tension. Cast iron is very brittle when flexed, but extremely strong in compression, thank heavens. The gold paint is just to look good. If you see a grand piano plate with dull gold crinkled paint, the piano probably dates from the early 1950s. They did that crinkling so that the piano plate wouldn't glare on black and white TV. If the gold plate is very dirty and tarnished, you can make it look a little better by gently rubbing it with fine steel wool (the 0000 type, used dry), and then vacuuming. You shouldn't use the steel wool over and over again, because you'll start getting through the gold to the under-layer, which is black. Touch-up gold paint will tarnish and look brown unless it has some kind of clear coat over it.

The beautiful copper bass strings will tarnish like a copper penny if you run your hands along them, as children in all innocence enjoy doing.

Keep everything wet or oily or waxy OUT of the piano! Oil or wax on the bass strings will harden and they will sound dead as door nails. Water on bass strings will rust the core wires and also deaden the sound. The only cure for fouled bass strings is to replace them.

One can dust inside a grand piano, but be careful not to bend or dislodge the dampers. If you are bothered by dust and minor debris on the soundboard, there are devices which can reach through the strings to remove dirt. You can also blow the light-weight debris over toward the left side of the soundboard (close your eyes first!), where it can be wiped out with a dry cotton hand towel or wash cloth. The piano does not care about dust on the soundboard, but owners sometimes do.

A light woolen string cover can be a good idea, especially near the ocean. It keeps the salt air away from the strings. Some very harsh sounding pianos sound better with the slight muffling from a professionally made string cover or from a light woolen blanket. Don't use a synthetic fabric. It can attract moisture and rust the strings.

Now, let's discuss a string's anatomy. The strings have segments. The part you hear is called the speaking length. It extends from the front bearing to the nearer bridge pin. The other parts of the string (both in front of and behind the speaking length) are called the back lengths or the waste lengths.

The front bearing and the first bridge pin are called terminations, because they are where the speaking length terminates. They are extremely important for the tone. If the front bearing has a groove in it, it can jangle. If the front bridge pin is loose or the string has worn a groove into the bridge top so it contacts the bridge in front of the bridge pin, the note can sound false or have false beats. Don't let anyone try to "seat" the strings by pounding them down near the bridge pins. It doesn't work, and it can do damage.

The clarity of tone and the transmission of sound is achieved by two types of bearing: down bearing and side bearing. If you picture a violin, down bearing is the pressure of the strings down onto the bridge. It works the same on a piano, except that due to the greater tension the bridge displaces the string a lot smaller distance. An old rule of thumb in setting a bridge height on a piano was to set the down bearing to the thickness of a nickel. The soundboard is very slightly dome-shaped (this is called "crown"), and the

string tension pressing down through the bridge against the very slightly crowned soundboard enhances the tone. With time, the soundboard dries out and shrinks, and we say it has lost down bearing. When a piano has lost down bearing (or even has negative bearing) the tone usually starts very loud and bangy, but then doesn't sustain. Some old pianos with little or no down bearing still manage to sound pretty good — there is a certain amount of magic to all of this.

We'll look harder at the soundboard in a future article, where we will have a guided tour of the piano from underneath it.

Side bearing is what happens when the string goes around the bridge pins, which are angled. It defines the speaking length by giving a good termination.



Bridge Pins

Now let's look at the front end of the strings. Since the strings on a grand are hit from underneath, they have to be held down. There are two ways to do this: agraffes, and V-bars. On most pianos, the middle and bass registers have agraffes, which are pieces of brass with holes through them, which are threaded into the cast iron plate. If one breaks, getting the stub out and replacing it can be a BIG NUISANCE.



Agraffes

Notice that the wire in front of the agraffes goes over a kind of mound covered with red woolen cloth, usually with layers of card underneath to give it the right shape. This is called the counter bearing. One only sees underneath the old cloth (about to be discarded) when the piano is being restrung. The new cardboard is a good place to write information and a date, which will be hidden from view for decades.

The other type of front termination, part of the plate with a V-shaped ridge on the underside (hence, "V-bar"), is called a capo bar, or sometimes a "capo d'astro" bar.



Capo Bar

The top two sections of grand pianos usually have V-bars, though some less expensive pianos have bars in all the registers, instead of agraffes. Technicians talk about the "first capo section" or the "upper capo section." If you look closely at the photo, you may be able to see that there is a thin metal ridge just in front of the red felt blocks. This is the counter bearing, and the V-bar (which holds the strings down, but out of sight in the photo) is the main bearing. On grands the length of wire between the V-bar and the counter bearing is longer than in uprights. It's called the front duplex, and it gives some spice to the tone by sympathetic vibration. Sometimes when the V-bar has been deeply grooved by the wire, the tone goes beyond spicy and sounds like a buzz or even a jangle. You can tell if this is happening by laying a finger on a group of three strings in the front duplex, and playing the note. Any problematic noise made by the front duplex will be muffled. If you are playing on a concert piano, and you see that the front duplex has little pieces of action cloth woven into the strings, or sometimes small pieces of gaffer's tape on some of the front duplex's strings, leave them alone! They are there to moderate some of the nastier sounds and to even up the voicing, without removing all the sizzle from the tone.

Some of the sizzle also comes from the rear duplex. Look again at the photo of the short stick. It has a good view of the rear duplex area in the treble. There are sometimes metal supports put in between the rear bridge pins and the hitch pins. These sometimes are called "aliquots" in case you want to know a fancy word.

A treble string's journey: Each string goes from a tuning pin over the counter bearing, under the capo bar, around the two bridge pins, over the aliquot if there is one, and then arrives at the hitch pin. Hitch pins have been driven into slanted holes drilled into the plate. They are designed to resist the tension of the wire. Each treble wire is bent around its hitch pin, and heads back toward the tuning pins. So, most strings go from the tuning pin to the hitch pin and then back to a neighboring tuning pin. However, a very few just go in one direction and have a loop at the far end, which is tightened around the hitch pin. Some pianos, particularly European ones, have a loop for every string. This is helpful if a string breaks, because you'll only be missing one of three (per note), instead of two of three.

When you get below the middle register in the piano, rear duplex segments are no longer left unmuffled to provide sympathetic vibration, and the waste lengths are wound with a twill fabric called stringing braid. Key bushing cloth is denser and works even better. The idea is that the waste lengths are getting too low in pitch and will sound like un-damped notes within the range of the piano if they are not muffled.



Tail of a Steinway D

If the stringing braid isn't doing its job well enough, you can sometimes hear a note ringing on, which can sound like a damper isn't working right. Yet if you press the damper down, or damp the speaking length of the string with your finger, the sound still goes on instead of stopping. You can locate this kind of sympathetic vibration in the waste lengths by having someone play the note while you go around to the rear of the piano and put your hands on various parts of the wire behind the bridge to see if the sound disappears. You can also pluck the partly damped back lengths to see if one pitch is prominent. Once the offending place is located, it is fairly easy to rearrange or tighten the stringing braid, or add another piece of it.

Looking at the photo of the tail end of a Steinway D, first, all the bass strings have long loops. Second, they are on a different higher level than the tenor wire so that the bass strings can cross over the tenor strings. This is called over stringing. It was invented in the second half of the 19th century, and soon was universally adopted, for both grands and uprights. In order for the distance each hammer has to travel to remain the same throughout the piano, the bass hammers in a grand are made longer than the rest of the hammers. The opposite is true in an upright, because the hammers are on the opposite side of the strings.

Some nomenclature: the treble strings which come in groups of three are called "trichords." They are damped by pieces of flat damper felt in the middle register, or by a kind of felt called "split wedge" for the longer tenor strings. Bass strings which need to have more mass to sound low enough are wrapped with copper, and are called wound strings. The transition from the tenor section to the bass section is called the "break." A well designed piano won't have too obvious a change in tone at the break. Some pianos have wound strings on a few notes at the bottom of the tenor section, usually in pairs



Bass Dampers

("bichords"). This is done to make the change in tone going to the bass section less obvious. The damper felt for a bichord is a simple wedge. Singles, or "monochords" are very thick, down at the bottom of the scale. Their dampers have semicircular dents which rest on the strings.

You can see in the photo the three kinds of damper felt: split wedge, wedge, and monochord. By the way, wound trichords are usually found only in good quality concert grands, though sometimes a few very old and substantial uprights have some. They are a sign that someone designing a piano cared about quality more than cost control.

More about dampers later, when we deal with the pedals and the action cavity in a later article. After struggling with grand dampers for an hour or two, one starts to think it's a miracle they work as well as they do.

We're nearly done, but there are a few more details to mention. Notice in the photo of the capo bar that the tuning pins have neat coils on them with three turns each, very uniform. Also, you can see that there is some space between the tuning pins and the plate. A lot of pianos have wood liners for these tuning pin holes, called plate bushings. Steinway has none. Also, in the first photo, you can see a long diagonal plate brace with small gold-painted bolts holding down each end. There is a little curve taken out of the bottom side, so it clears the damper heads with room to spare. Only long Steinway grands have this diagonal bar, so if you are looking at YouTubes which offer only quick glances into the piano, and you see that removable bar, you know the piano is a Steinway, though not whether it comes from New York or from Hamburg. The shape of the "cheeks" at the ends of the keyboard will tell you that. New York's have a square shape, while they are curved for Hamburgs, which also are more likely to have a shiny polyester finish.

The Unseen Revealed, Part 3:

Where a less unseen area is described

Locating a serial number:

The little triangular area at the break is a common place for a serial number. Another is on the right hand side of the plate in front of the tuning pins. Some brands emboss the serial number into the soundboard, usually toward the treble end at the front. A few put the serial number on a small piece of ivorine on the left inner side of the case, usually hidden by the music desk. If a piano plate has been refinished, the serial number may have been painted over. In



this case, one can sometimes find it stamped or written on the action frame or the case parts, hidden from view till they are taken apart.

In this last photo, you can see the model number "D" as a raised letter on the plate. This piano has been rebuilt, so both the style of the serial number and the look of the gilding is a little different than it originally was. In the foreground of the photo you can see the heads of two of the perimeter plate screws. Spaced a few inches apart, they go all the way around the edge of the plate down to the tail end.

This piano belongs to Linfield College, in McMinnville. I thought of a way to remember its serial number. "When do you expect to finish tuning?" "Oh, at 5:15 or 5:30" Most piano technicians have a piano atlas where they can look up a serial number and get a date of manufacture, if the company is large enough to have their serial numbers listed. This information can also usually be found online.

Maybe we should end with another metaphor, now that we've looked at the soundboard, which could be called the soul of a piano, and the strings, which could be called its voice. Metaphorically, can we say that the piano is a person, a human being? It doesn't look like a human being, but it certainly seems to act like one sometimes. Is it a friend and companion? Is it an adversary? Can you persuade it to speak with your voice? Does it rush to cooperate with you, meeting you more than halfway? Some pianos do.

My article in the next issue will go back to exploring places most piano owners never get to see.



Baxter's Bookshelf

Since this is an issue that involves a lot of poetry and metaphor, I would like to mention some of my favorite volumes that sustain me. I have dog-eared copies of all of these and go to them often.

Billy Collins: The Art of Drowning, Questions about Angels

Dana Gioia: *The Gods of Winter*Donna Henderson: *The Eddy Fence*Garrison Keillor: *Good Poems for Hard Times*

Jane Kenyon: Otherwise

Alison Luterman: The Largest Possible Life
Joan McBreen: The Wind Beyond the Wall
Naomi Shihab Nye: Words Under the Words
Mary Oliver: New and Selected Poems
William Stafford: Quiet Places

Clemens Starck: *Journeyman's Wages, China Basin*Anita Sullivan: *The Family Piano*