An Interview with Lois V Vierk

I've always felt I had something to say. That's why I started composing, and that's why I continue. And I love it. I love the sounds. I love working with sounds to put pieces together. After I write a piece I love to hear the sounds that I had been imagining and hearing in my head, played for real. The sounds of instruments, even after all these years I've spent composing, always take me delightfully by surprise--how beautiful they are, how rich and full. These are the things that keep me going.

When writing a new piece, I need to start from the sensuous, visceral sound itself. I need to hear and feel what the instruments can do--things like how loud and powerful they can be, or how soft and delicate, how high, how low, how fast, how slow, how lyrical, how accented and agitated, how smooth and languid, and so on. I like to get together with players face to face and improvise sounds. For example, even though I've written two string quartets, I know that when I write my third I'll schedule a session with players so that I can hear and feel the string sounds afresh. Fine players often show me qualities of the instrument and playing techniques that I couldn't come up with on my own, because they work with the instruments and live with them, day in, day out.

After that, when I take pencil and paper, the physical sounds will still be ringing through me. I'll sketch maybe 100 pages or so, depending on the piece. I try not to censor anything I write. I look at what I've put down on paper and let myself feel how the sounds flow--their energy and their direction. When I feel the sounds in this way I want to work on them to make them more beautiful, or clearer or stronger or more dynamic or dramatic--in other words, I want to let them flow as much as possible. It's incredibly fun to do this.

At some point as I'm hearing and feeling the sounds, I start to think about the piece as a whole. I don't care to work on just sound or just structure, independently. They're always together in my mind. I'll consider things like which sounds work together, how do they fit, what do I want to say with these sounds? What order should they be heard in, and what kind of structure suits them? How does a certain sound have to change to create a stronger or clearer structure? Or how should the structure be modified to better show off certain sounds? And what doesn't fit here at all? Gradually I discover a form for the piece. Based on the sounds and the emerging form, I decide how one sound will develop into another, and I get a sense of the relative durations that each kind of sound will have in the piece.

I've always felt equally drawn to the West and to the East, in terms of my analytical training in Western music and the musical principles I learned during twelve years of actively

studying and performing *gagaku*, ancient Japanese court music. *Gagaku* is a slowly unfolding music that is at once massive and loud, as well as sensuous and refined. The word *gagaku* literally means "elegant music."

Many of my early pieces written in the 1980's were for multiples of the same instrument--an ensemble of eighteen trombones or eight cellos or five electric guitars, for example. I think that this multiples idea first came to me from certain pieces in the *gagaku* repertoire, where three bamboo *ryuteki* flutes or *hichiriki* double reeds play canons in free rhythm. The transparency of timbre allows small nuances of dynamics, articulations, pitch slides, et cetera, to be clearly heard. I began thinking of two or three instruments within my ensemble acting together to form one voice, or what I call a "sound shape". One sound shape interacts with another sound shape, which is likewise made up of several instruments. In effect, I have a "counterpoint of counterpoints." The sound to me is at once complex because of all its many parts, but also clear and direct, because of the transparent timbre.

One of the sounds I find myself writing over and over is the glissando, or sliding tone. I don't know why I always write glissandos--maybe it also started with *gagaku*, which has a lot of sliding tones--but it is just such a beautiful and also natural sound to me. For example, there's a sweep in the sound of water flowing, the wind blowing, in the cry of the loon. I hear glissandos everywhere.

I've written music for all kinds of musical forces, from solo instrument to chamber ensemble to orchestra to Japanese *gagaku* orchestra. But I have to say that I always get very excited when I work with tap dance, and specifically with Anita Feldman Tap, a company of tap dancers and musicians. Since 1987 the tap choreographer Anita Feldman [known in dance and music circles for her extensive work with composers] and I have been collaborating on "new music/tap dance" pieces, where we try as much as possible to eliminate the distinction between music and tap dance. The tap dance sounds are part of the total orchestration of the piece and are notated along with the other instruments. The fact that Anita studied percussion and reads music really facilitates this process. We've done pieces for tap dance with percussion instruments, with strings, with singers, and with electronics. Some of our pieces use Anita's gorgeous Tap Dance Instrument. She and the instrument builder Daniel Schmidt designed this patented instrument for tap dancers to play with their feet. Its six modules consist of the "tap marimba" (with seven keys of different pitches), two brass floor segments of different sizes that ring when struck by a tap shoe, and three wooden modules with different kinds of resonances.

Typically, Anita and I collaborate in all stages of creating a piece. We gradually develop the basic sound and movement materials together in sessions with dancers and musicians. Then we continually work and rework the raw materials, eventually creating phrases and sections and the work as a whole. I really like the physicality of using the body and the foot to play music. I find it's easy to get all wrapped up in the combination of movement, bodies, and sound. It's so satisfying to me and completely compelling.

I don't come from an artistic family, although my mother did have an old piano in our house. She taught me the basics of music. To start, we took a pencil and wrote C, D, E, et

cetera, on the piano keys. My mom played for fun, out of hymnals and folk music books. She wasn't a pianist in any way, shape, or form, but she taught me how to read notes, and she gave me some little notebooks to write in. I wrote notes all over them--I was three years old or so--she still has those notebooks with my scribblings in them. Did they make any sense? No, I don't think so. But my mom always says those were my first compositions.

I took some ballet and tap lessons at the neighborhood dancing school, but I didn't begin piano lessons until I was about twelve years old. My home town was Lansing, Illinois--quite close to Chicago, but we really didn't go into the city very often. As a child going to a Lutheran school, I was also very interested in sports. We played softball everyday for eight years through grade school. Besides that, I loved mathematics, and was coached and encouraged by my father in this. When it was time for me to college, I didn't know what I was going to do, music or math. I also loved visual art a lot, but I didn't have a portfolio, and I had never taken drawing lessons.

All of this time I had been playing piano, but I wasn't composing. I ended up studying music at Valparaiso University, a Lutheran school in Valparaiso, Indiana. Not too surprisingly, the emphasis in the music department was on church music, especially on playing the organ and on choral conducting. At first I didn't really know what I wanted to do in my musical life, but after a couple of years at Valparaiso, I found that I really wanted to study non-Western music, wherever that might take me. This desire came about partly because I had African American friends who said to me, "You're studying all of this Western music, but there's a lot you just don't know about." I started to think about what they said, and it propelled me on an odyssey that has affected the rest of my life. I transferred to UCLA, because at that time they had an excellent ethnomusicology department with top rate performing musicians from all over the world.

UCLA in the early '70s was a cornucopia of musical riches. When I first arrived in 1971, besides continuing my study of piano, I went from one ethno class to another, learning a little music from Japan, China, Ghana, Bali--along with some dance from Yugoslavia and Japan. The Japanese dance I studied is called called *bugaku*, which is performed to *gagaku* music. After about a year, I decided I loved *gagaku* and *bugaku* the best, and that's what I stuck with. Even after leaving UCLA, I continued for ten years to work with my *gagaku* teacher, Mr. Suenobu Togi. Eventually I went to Tokyo for two years and studied with Mr. Sukeyasu Shiba, lead *ryuteki* flutist of the emperor's Imperial Court Orchestra, and a colleague and friend of Mr. Togi's. Both of these exquisite musicians come from families of *gagaku* musicians who trace their ancestry back to about the 8th century A.D., when the first artists and scholars were brought to Japan from China.

By the time I graduated from UCLA, I knew I wanted to compose, and I also felt I needed to study more of the basics. So between undergraduate and graduate school, when I was making my living playing piano for dance classes at the Los Angeles Ballet, I asked my piano teacher, Aube Tzerko, what to do. He recommended that I study with Leonard Stein, who had been a student of Arnold Schoenberg's (and eventually founded the Schoenberg Institute at USC). I called up Leonard Stein and explained who I was and who had told me to call, and he said, "Where do you live?" And I told him where I lived, and he said, "Do you have a car?" And I said, "No, I don't have a car," and he said, "Well, there are no buses here, so you can't come."

His point was that he really wanted me to study with one of his students first before I came to him. He gave me the name of Dean Drummond--Dean was my very first composition teacher. (Dean Drummond is known these days for his gorgeous compositions on the Harry Partch instruments, and on "regular" instruments as well. With Stefani Starin, he directs the well-known performing ensemble Newband.) I worked with Dean for about a year and then he sent me back to Leonard.

I took private lessons from Leonard for two years. He's one of those rare people who can lead you to discover just what it is that is important to you musically. He does this without making you do something in particular, without limiting you to a particular method or style. Leonard would never tell me what to do--he'd say, "Let's look at the way Composer X solved a similar sort of problem." We analyzed a lot of pieces by composers like Schoenberg, Webern and Berg, and Leonard also introduced me to Xenakis and Ligeti and Berio and Stockhausen, and to LaMonte Young, who had been one of his students, too. Leonard was always interested in my study of *gagaku*. He knew a few of the best players of other types of traditional music in Japan, and on occasion they would give concerts at his home.

After a couple years Leonard suggested that California Institute of the Arts, where he himself taught several classes, would be a good place for me to do graduate work. I entered Cal Arts in 1976. While there I studied composition with Mel Powell and Morton Subotnick. Mort would look at my scores and say, "OK, I see what you're doing, but now, push it! Push it, take it to the extremes. Do more of it, find the end point." That was just exactly what I needed to hear then. I learned how to make strong statements even stronger. Mort also taught his students, by example, what it could mean to be a professional composer. He had concerts and performances all over the place. He showed us that there was an exciting world outside academia, and we could take part in it.

Mel Powell told me so many important things. Even today when I sit down to compose, some of his succinct, profound words come to mind. Mel would often use the term "multiplicity". To me this meant that a piece could be doing more than one thing at a time. Or that a sound could be complex, even though its shape or flow were very clear. The word also made me consider how a piece exists on different levels at the same time. As I thought about it more and more, I realized that for me, a piece has to make sense in many different ways at once. I want it to flow sensuously, intellectually, emotionally.

Mel would say, "Here's a beautiful sound--now what's the destiny of this sound? Think of the whole piece, and ask yourself, where does that go, what becomes of it?" I realized that one sound might undergo a certain rhythmic development, or get louder and louder, or become more and more ornamented, while another might gradually fade out and disappear, because that was what was called for to strengthen the piece as a whole. Mel made me aware, in a conscious way, of many aspects of composition. I figure he cut about ten years off my learning process.

At the point I worked with Mel, I was still doing Japanese music. If I had been learning it in the traditional way, I would have been a boy, of course, and in one of the hereditary *gagaku*

families connected to the emperor's court. I would have started off at age eight or nine, learning the dances that had been handed down through the centuries to my family members. Well, I did start out learning the dances, but I was in my twenties by then. First, I learned to move my body and to breathe with the movements. The next thing was to learn to sing the vocal parts to pieces. These vocal parts are sort of like solfège, but it's more a solfège of gestures than of pitches. When I got to Japan, my teacher there very kindly recorded the vocal parts to a large portion of the *gagaku* repertoire on cassette tape. I would play these tapes and memorize pieces by rote, phrase by phrase, singing them back without using notation.

The next step in the traditional process would be to finally pick up an instrument. At UCLA Mr. Togi had to let us begin with the instruments right away, since university students usually don't spend many years learning the art form. Also, university regulations dictated that students receive course credit for only two or three quarters of class--hardly enough to scratch the surface! But traditionally with *gagaku*, before you touch a bamboo flute, double reed, or mouth organ, you have already been learning with your ears for a long time. If you ask your *gagaku* teacher how to do something, he might say, "Just do it." Or you might not get an answer at all. It's a very, very deep way to learn.

Since the 1980's I've been developing my own principles of sound organization, which I call Exponential Structure. This came to me from my knowledge of math and physics. All sensory phenomena in the body are measured in exponential terms, not in linear terms. The one exception is the length of a line--if you look at two lines, you can judge pretty much if one is, say, twice as long as another. You perceive it as twice as long, and it is, in fact, twice as long. But other examples are not so straightforward. A sound that subjectively sounds "twice as loud" as another does not have twice the amount of energy. A light that looks "twice as bright" as another doesn't have twice the amount of energy. The same applies to touch stimulation and perception of pain. There have been many studies by acousticians and psychoacousticians of sensory perception versus amount of actual stimulus present. After lots of experiments, researchers have shown that every kind of stimulus yields a different equation, a different curve. The relationship between perceived and actual amounts of stimuli is an exponential relationship, not a simple arithmetic one. What sounds, looks, or feels like "twice as much," "three times as much," "four times as much" as the first stimulus, is not two or three or four times the first stimulus. It is actually some number squared, cubed, to the fourth power, et cetera, times the first stimulus. It's fascinating. So I wondered, what would happen if I applied this idea to time, to rates of development and rates of change in a composition?

That started me on another lifelong path, which at the beginning I followed in a very simple and direct way. The first section of the piece, which might be based on a certain pitch, would be x number of seconds long. The second section would be, say, .9 times x, the next section would .9 squared (or .81) times x, the next would be .9 cubed (or .73) times x, the next .9 to the fourth power (or .66) and so on. In this scenario the sections of the piece are always getting shorter and shorter, and the pitch centers are changing faster and faster.

Then within that macro structure I would develop rhythmic changes, say, from a slower to a quicker rhythm. Maybe in the first section of the piece I would have only half notes, and by the last section I would have mainly sixteenths. I might make another structure for timbral changes, following a totally different equation. In other words, I would nest several structures for different aspects of the music within the overall structure. Changes of different aspects of the sound would take place at different rates.

This mathematical process is integrated with and dependent on the emotional thrust of the piece. For instance, in my piece *Simoom* for 8 cellos, I felt that the piece should end dramatically, on the lowest pitch on all the instruments with energetic accents and tremolos. I knew the glissandos were going to occur over a wide range and be loud at that point and that I wanted to end with a lot of strength. I knew I should use a gradually contracting set of numbers, gradually shortening time segments, to get to this point. Little by little, excitement and drama would build up, both in the sounds and in the structure.

Different sets of numbers will produce different kinds of results, and I can use these results to get at different kinds of emotional qualities. I think of Exponential Structure as a sort of meshing of emotional impulses with a system that expresses them. And the more I write, the more freely I use it. Sometimes I won't use it at all, or maybe I'll use it for a certain part of the piece. It's not an abstraction, it's a tool.

I've come to be able to work in almost any situation, as long as it's quiet. If it's noisy, I have to turn on a white noise machine. When I first began to compose, I always needed to write first thing in the morning. Now I can be dead tired, and if I have to, I'll stay up all night and work. I don't like to, it's not great for my body, but I can do it when I need to. When I'm working on something every day, day after day, it seems to become both a conscious and an unconscious expression at the same time. When I'm in that mode of working, it's just terrific. I am in the piece, the piece is in me. I can write without thinking about it, and then go back later and see if it's what I wanted. If I'm really in the right working mode, it still makes sense when I go back to it. Sometimes I'll go back later and see tha I've got the right general idea but it's got to be more developed, or longer, or more embellished, or more emphatic, or something.

I've also found that the way I feel emotionally has nothing to do with the way the music comes out. Sometimes I feel very good when I'm writing--it all seems to be flowing along--but when I go back later I have to make a lot of changes. Other times I'm feeling awful about what I'm writing, and I put the work down and come back the next day and it's all fine. I think the music comes from a place other than where my immediate emotions originate. I think the best thing to do if you're creating something is just to keep doing it, no matter what. Just continue.

I need to be renewed by nature. I love hiking, and I've done a fair amount of backpacking. Just last week my husband and I went up to Vermont because the leaves are turning from green to brilliant reds and oranges and yellows. I need that. I need to hear the water falling, and the surf

crashing. I need to feel the wind. I need that motion, that movement. I need to see the clouds in the sky. I also like to have animals around, and I love to garden.

I read a study about people recovering from illnesses in hospitals, and those who had a tree outside their window recovered in 40 per cent less time than the ones who did not have a tree to look at. I think there's something so deep in that, some kind of resonance that exists between the growing tree and the human observer.

I think it's important to constantly be reaching. Some people say each composer does the same piece over and over. I think there is some truth in that, because music comes out of the person, music is of the person. When the person changes, the work changes.

A piece is an expression of a certain time in a composer's life. If I write a brass quintet next year it will be different from the one I wrote last year just because it's a different time in my life. If I write a phrase today, it will be different from the one I'll write tomorrow. I don't believe that each particular note is precious. A note is just part of a piece. But certain principles carry through an entire piece--that's what you have to hold onto. I don't really worry about making little mistakes--I go for the whole thing.