A master of polytempo and microtonal composition talks about his process and practice

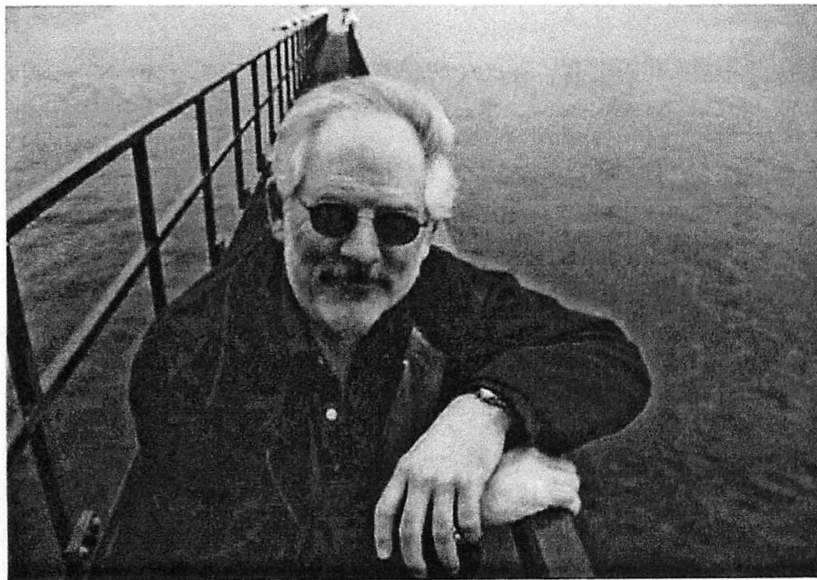
pitch and rhythm guy

KYLE GANN IN CONVERSATION WITH DAVID MCCALLUM AND GAYLE YOUNG

KYLE GANN HAS BUILT AN international reputation as a composer of music that is either polytempo, microtonal, or occasionally both. A self-described "pitch and rhythm guy," he's worked to expand the mutual perceptions of listener and performer, often using technology to do so.

Gann was the new-music columnist between 1986 and 2005 for New York City's *The Village Voice*, providing a public voice for—and occasionally at odds with—an entire community of artists. The best of these articles were compiled in his 2006 book, *Music Downtown*, published by the University of California Press. His 1995 book *The Music of Conlon Nancarrow* is the definitive guide to the music and compositional language of Nancarrow, the American-Mexican composer known for writing exclusively for the player piano. Gann's guide to recent American composition, *American Music in the 20th Century*, was published by Schirmer Books in 1997. He has taught music history and theory at Bard College in New York State since 1997.

PHOTO BY SUSAN SAN GIOVANNI



Kyle Gann

PHOTO BY JORGEN KRIELEN

Gann was invited to present the keynote address in Winnipeg at the 2007 conference of the Canadian New Music Network, where he spoke about the long tail effect, providing an empowering take on current distribution trends for unfamiliar forms of music. Gann is one of the composers who's shifted the focus of his energy to the Internet, and his address showed his optimism that the Web might prove our artistic—and financial—salvation. While in Winnipeg, he spoke with David McCallum and Gayle Young about his own music, and we began by discussing his then-current composition *Sunken City*, a piano concerto commissioned by the Orkest de Volharding in Amsterdam.

sunken city

KYLE GANN: The Orkest de Volharding combines brass and reeds, and this piece will also include guest pianist Geoffrey Douglas Madge. I love his recordings. He recorded the complete Busoni piano music for Phillips and I'm a big Busoni fan. He also did the Sorabji *Opus Clavicembalisticum*. He's used to playing these huge pieces. I don't usually write huge, but this piece is for piano, three trumpets, three saxophones, three trombones, bass, and flute, and horn—a really odd combination. I always wanted to write a piano concerto, though. So I'm listening to 1920s jazz, because that's where you get piano combined effectively with reeds and brass. Also the Stravinsky Piano Concerto, of course, and the Kevin Volans' Concerto for Piano and Winds, which is a great piece for those instruments.
GAYLE YOUNG: When you start a new piece, do you always make a thorough analysis of other pieces written for similar instruments?
KG: You know, I wouldn't normally, but I don't write for brass and this is such an odd instrumentation that I had to think about it that way. I don't know to what extent you can hear the piano when you have three trombones playing.
DAVID MCCALLUM: What have you learned in listening so far?
KG: Well, that the brass stops, and then the piano plays! [*Laughs*]
GY: It's call and response?
KG: Yeah, it's similar to the Copland Piano Concerto where he's imitating jazz, and the orchestra starts playing solos and the piano starts comping beneath them. It was real clever in 1926 and I'm hoping it's still clever today! [*Laughs*]

I'm making it a homage to New Orleans. Because New Orleans jazz has that instrumentation, and I want the second movement to be really slow and kind of devastated. Programatically, that came up as an obvious choice.

composure

GY: What other pieces are you working on?
KG: The one I'm most excited about is *Composure*, an electric-guitar quartet for Tim Brady's "Voyages: Montréal-New York" festival next April. I just directed a performance of Julius Eastman's *Gay Guerillas* for nine electric guitars, and I learned a lot about writing for electric guitars. I'm eager to put it into practice.
GY: What did you learn?
KG: What kind of resonances you can get with repeated notes.
GY: You mean feedback-based resonance?
KG: No, I'm just a pitch and rhythm guy. There are certain tempos at which you can get nice resonances in repeated notes of guitars but if you go past that you're always dampening the string too fast. So there's a kind of idiomatic speed at which you can do those things and make them effective. I also like the effect of having melodies bouncing back and forth among different guitars, because they inevitably have a different timbre. Two electric guitars don't really sound the same.
DM: Do you find that more with guitars than any other instrument?
KG: Well, more than I would expect. I've written for multiple pianos and don't think it's nearly as dramatic. My son has ten different guitars, and to him, they're all completely different worlds. You would never use *this* guitar for *that* piece. The sounds are very different. Unless it's four of the same make of guitar, it's not going to sound the same.

pitch

GY: What kinds of pitch and harmony concepts are you working with?
KG: I had a conversion. In 2000 I studied jazz harmony and switched to bebop harmony. To me it seemed that twentieth-century classical music just dropped the ball on harmony. They gave us pitch sets, and there's nothing more useless than a pitch set. And meanwhile, all the energy went into jazz, fantastic stuff that you can build on and go in lots of different directions with. The classical people just didn't know what they were doing.

GY: Where did you study jazz harmony?
KG: I took a course at Bard with John Esposito. His own music is real hardcore bebop. It's where bebop would be now if it had just kept going. He writes very complex music: for example, an arrangement of "Autumn Leaves" in which the theme is played backwards but the harmony is played forwards and somehow it all fits. I looked at the score ... I can't wrap my mind around it [*laughs*].
GY: Is this the kind of jazz harmony that is built with thirds so that you get ninth and eleventh chords?
KG: Pretty much. One of the things I like about bebop harmony is it matters what register things are in. In classical twentieth-century harmony, it's supposed to be the same chord no matter where you put the pitches, and you get all those Boulez chord multiplications and pitch sets and various things. It doesn't matter whether the D-flat is in the bass and the C and E are up in the treble, or vice versa. In bebop harmony, it always matters: that's part of how you adjust and nuance the harmony. Register controls how clear the harmony is. If you have the root and the bass and the dissonant notes are way up high, it's a much clearer harmony than if you have kind of conflated them. You can't put the flat thirteen in the bass and the root up at the top, because it becomes a different chord. You could put a flat nine in or a sharp nine in. You have a lot of control over the colour and comprehensibility of the chords. Once you get enough ninths and elevenths and thirteenths in a chord, some of those pitches exchange function if you exchange the root. So you could just switch one note and it will be a different chord, but all the other notes are still in the same place. And so it's easy to nuance the functionality. The obvious thing is the tritone substitution, because the third and seventh can become the seventh and third of the chord a tritone away.

If you listen to "Sophisticated Lady" by Duke Ellington, it's all just chords moving in half steps. But in the actual analysis, half of those are tritone sub chords, and it's theoretically going around the circle of fifths; but since they're all substituted in, they end up as half steps.
DM: How did jazz theory affect your compositional thinking?
KG: Before this, I had two styles; one for microtonal music and one for equal-tempered music. With jazz harmony I'm able to so the same thing with both, so I feel a little bit more unified. The nice thing about writing microtonal music is that you can write chord progressions with really simple chords and feel like that particular progression has never been written or heard before. And so, my microtonal music is frequently just regular triads and seventh chords, but the way the voice leading between the chords goes is so peculiar that it ends up not sounding normal. It's usually consonant, but when you're shifting between chords whose roots have quarter-tone relationships with each other, you lose your bearings of where the tonal centre is. There's always a note that's defined as 1/1, but you can end in a key that doesn't include 1/1. Somehow, there's always a centre of gravity—the piece tends to collapse back into the tonic somewhere, but you can avoid it for ages.
GY: And when you're not writing microtonally?
KG: Then I have to shift more of the interest to rhythm.

Excerpt from *Sunken City* (2007)

rhythm

GY: What kinds of rhythmic organizations do you use?
KG: Usually, I try to imply two or three different tempos going at the same time. I'm trying to write a new piece that I can go on tour with as a soloist that uses both that rhythmic approach and microtonal pitches. In fact, I got a new computer so I can perform on Kontakt software. The piano concerto *Sunken City* will switch back and forth between quarter notes, dotted eighth notes, and quarter notes tied to sixteenth notes. That concept came primarily out of my studies of southwest American Indian music, the way they switch back and forth between different tempos.

Unquiet Night is the longest of the disklavier pieces and it's got the most rhythmic complexity to it. It seems very freeform but it's all based on seven bebop chords. I try to make it very fantasmagorical and stream-of-consciousness, but it's like a dream—the same stuff keeps coming back over and over.
DM: You talked about implying different concurrent tempos. Why imply them instead of actually doing it?
KG: Because of comprehensibility problems and performance difficulty. When I was younger, I wrote some pieces in which people kept different simultaneous tempos going by watching silent metronomes. But it's a terrible thing to ask people to watch a metronome—essentially, to keep time with a flashing light while they're playing—and it's

Excerpts from *Custer and Sitting Bull* (1998-99)

not very effective. People can only really follow a sounding metronome. I wrote one piece where three different groups played at different tempos and it was well-nigh incomprehensible. It was right after that that I studied American Indian music and started going back and forth between different tempos. The players were keeping different tempos in their heads at the same time, switching among them, and the tempos ceased to have absolute relationships to each other. If you're playing quarter notes and then you go into dotted eighth notes for a while, the dotted eighth notes—if you're *lucky*—end up not being exactly proportional to the quarter notes. They become simply a different *felt* tempo. And that's an effect that I try for a lot.

GY: Which cultures were you referring to when you studied that approach to rhythm?

KG: It was Hopi, Zuni, San Ildefonso, Acoma—all of the Pueblo tribes that had come up to the southwest from Mexico.

GY: Were you able to speak with the musicians?

KG: Oh, a little bit. I had a friend in Chicago who was a Zuni who let me sit in on his rehearsals. I asked him questions about why he was accenting this, or why the rhythm would do that. He always claimed that he didn't understand and maybe he just didn't think about the music that way. But, yeah, I tried to learn a little bit about the music from the musicians, but there wasn't a lot of information forthcoming.

GY: So you picked it up by ear?

KG: Yeah. Well, I transcribed lots and lots of recordings.

DM: Has there been much musicological research done on this music?

KG: Well, certainly, there are a lot of transcriptions. I have a lot of the old Frances Densmore recordings and she wrote a huge ethnography of American Indian music, a gigantic project. The transcriptions are fantastic, but the only thing I could figure out was that when the Hopis danced these rhythms, some of the tempos seemed to have to do with arm movements and some had to do with leg movements. But then you'd go to another dance where there didn't seem to be any such correspondence. I never felt very confident generalizing about it. I did see a Hopi Butterfly Dance once, in which it was very obvious that different tempos had to do with moving different parts of the body.

GY: Does it bring a listener or performer to a different way of experiencing rhythm?

KG: Well, I think so. If you're going along in quarter notes and then you have these spurts of triplet quarter notes that aren't necessarily in threes, I think you get the feeling that there are underlying tempos and that at any moment you can switch from one to another.

In the '90s, and even in the '80s, there were lots of people in New York exploring these kinds of rhythms. Ben Neill was doing it with computer installations, Michael Gordon was doing it with the Michael Gordon Philharmonic, Mikel Rouse with his Broken Consort Quartet. It turned out nobody else had taken it from the American Indian angle, but everybody was doing these kinds of pulsating gear shifts that came out of a minimalist context. You start doing these real repetitive lines and then you shift back and forth between different note values. When I realized this, I wrote an article about it. I picked the people who I thought would be good for the article, and got scores from them, and found that they were doing similar things. The practices from one person's score to another were remarkably similar, but these people didn't know each other's music. It wasn't a movement in the sense that the people got together, but it was a movement in the sense that everybody had obviously been drawn to very similar ideas. That's when we started calling it Totalism.

totalism

GY: Why did you choose the term Totalism?

KG: It is related to Henry Cowell's idea of organizing rhythm the same way people always organized pitch. You had the harmonic series of pitches, and you had a parallel harmonic series of rhythms, and so you were doing a total organization of all the elements of music, like total serialism except it is not based on twelve-tone rows, but on the natural number series. So it was a total approach to being able to use rhythm and pitch the same way, which Cowell was trying to achieve and which Nancarrow was trying to achieve, also.

For me, it's a simple idea because I grew up steeped in Henry Cowell. And several dozen of us did, but it seems like too complicated an idea to catch on. I kind of despair of making it clear, but for those of us that were reading *New Musical Resources*, by Cowell, it's the simplest thing in the world. David First, Larry Polansky, John Luther Adams ... all these guys read that book, latched on to those ideas and it's what part of an entire generation tried to do in music.

DM: Did your work with the disklavier come from your interest in Nancarrow?

KG: Well, yeah, sure. Anybody that analyzed all that stuff is gonna try it out! When I came to Bard, Joan Tower, who was chair of the department at the time, was going to get a piano for my office. She gave me the choice of a grand or a disklavier, and I jumped at the disklavier. I wanted to try it out, and I was absolutely charmed by it. You don't have to think about performability issues. You can just write anything.

I've always got a fear that people will assume that I'm just doing what Nancarrow did, but I actually think my music for disklavier is much more stream-of-consciousness and a lot less structuralist than Nancarrow's. Nancarrow's sense of structure is so fanatically carried out on a large scale most of the time, and I never do that kind of thing. In fact, what I really love about writing for disklavier is that you *can* be so stream of consciousness, that you can start out somewhere and go anywhere and you don't have to plan ahead, because anywhere you stick a note, it'll just get played. You don't have to worry about whether the performers can feel the tempo shift, just plug down a note at that point on the page and at the right time the thing plays it. It's tremendously liberating.

I use one Henry Cowell idea that I don't know whether anybody else has ever used. Henry Cowell in *New Musical Resources* suggests that if you have three triplet quarter notes and five quintuplet eighth notes in a measure of four-four, they don't have to be grouped together [see Figure 1]. You can mix them up. Which is impossible to perform accurately from notation. In fact you can't even do it in Sibelius. But I had the old notation program Encore, which would let me do that. So my *Folk Dance for Henry Cowell* is all these completely irrational combinations of different tuplets within a measure. You could have a thirteen tuplet in sixteenth notes with a quintuplet of eighth notes, and mix them up. You can't have any beat-related feel to the music, though: it completely fights against it. But it all adds up by the end of the measure.

DM: Did Nancarrow score things originally with a staff and then turn it into player piano rolls?

KG: He started with a punching score, on paper. He would figure out his tempo relationships first, and he'd mark those off on the music paper. Then he'd start composing once he had the grid notated, so he'd know what was going to go with what. I'm pretty sure that's what he always did. I think he couldn't put down a note until he had marked off the tempos he'd used—except in some of the earlier pieces that don't have real tempo contrasts. He was a modernist and really had to think about his pieces globally most of the time. He couldn't just start out a canon without a sense of where the voices were going to come together. And I don't like doing it that way. I used to do it, but these days my music is much more spontaneous.

FIGURE 1: *Folk Dance for Henry Cowell, measures 5 and 6, by Kyle Gann*

DM: Why did you go in that direction?

KG: I think when I was young I used to cling too much to a preconceived structure out of fear. I found I could be much more spontaneous and free and fun and write better music if I would just let that go. And so I did, and it was in my disklavier pieces that I learned to do that. Now I'm trying to do it in ensemble music. I'm trying to write a piano concerto [*Sunken City*] without thinking ahead. It's tricky, but now all those rhythmic things I developed are part of my language. I use them as my building blocks, whereas I think I used to start out thinking more structurally to develop a sense of how those different tempos worked. That's what happens to everybody. At first you need some kind of crutch to help you develop something that has never been done before. And at some point, you internalize that. You don't need the crutch anymore. You throw it away and just do it. I've interviewed dozens of composers who've told me similar stories.

One of my best pieces in this respect, I think, was a quartet I recently had premiered, called *Kierkegaard, Walking*. It somewhat represents the Danish philosopher wandering around Copenhagen, and I wrote it refusing to think ahead. Every few measures the texture and tonality will just dart off in a new direction. And I'm very pleased with the result.

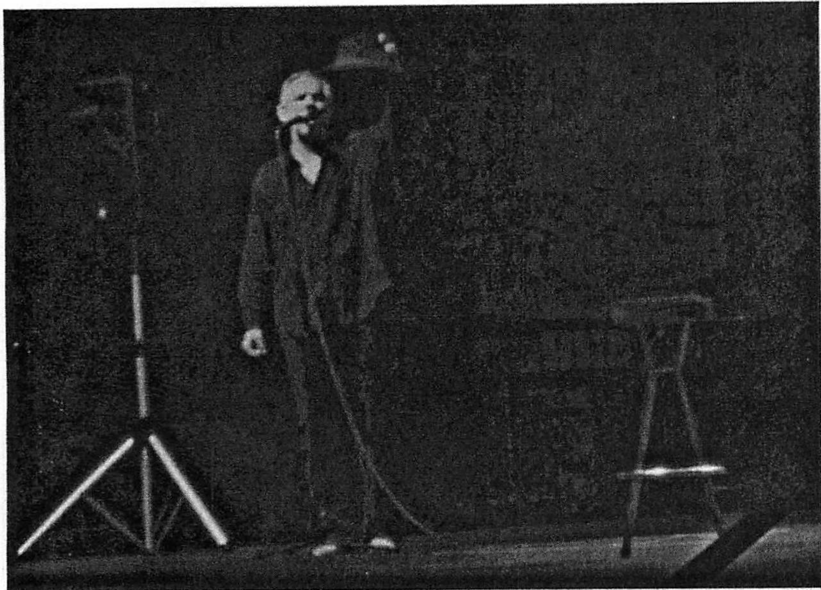
touring solo

GY: Can you tell us more about using Kontakt software? You mentioned it earlier, when you were talking about going on tour as a soloist.

KG: Kontakt is a virtual sampler, a MIDI-triggered performance software. Using another software called Li'l Miss Scale Oven (a fantastically simple and flexible tuning software; I'm always doing unpaid commercials for it), I can quickly retune any of the samples in Kontakt to any scale I want. Like any sampler, Kontakt has some wonderful sounds and some hokey ones—strings and brass are extremely difficult to synthesize well, but the mallet percussion, harp, and ethnic sounds are good, and there's a remarkably realistic piano sound. I use it in *The Day Revisited* on my new CD *Private Dances*, and one musician actually asked me what I did about retuning the piano, and couldn't believe it wasn't real.

One of the premises of a career in New York's downtown music scene is that you pretty much have to be able to perform your own music—or at least some of it. I got off to something of a late start because I had been used to writing ensemble music in college, and kept doing it. Finally, in the early '90s I got serious about building up a repertoire of pieces I could play myself, usually microtonal pieces with recorded backgrounds. The most ambitious one was what I call my one-man opera, *Custer and Sitting Bull*, which is kind of a thirty-five-minute spoken solo

PHOTO BY NORA FARREL



Kyle Gann as Custer in *Custer's Ghost to Sitting Bull* at the Powerhouse in Brisbane, 2002

PHOTO BY NORA FARRELL

cantata drawn from historical texts. That's the piece that went furthest in combining my idea of microtonality with what I was trying to do in terms of polytempos, and also of bringing politics into it, because there's long been a political side, too. I perform that piece by myself with a background CD (*soundfile*, I guess we call it these days) and keyboard synth. A director I worked with named Jeffrey Sichel coached me in some simple acting and movement techniques that allow me to perform it without embarrassing myself. I've performed the piece more than thirty times on three continents, but the older I get the harder it is on my memory. Custer died at thirty-seven, and I'm fifty-two—a little old to be playing him.

There are four texts in *Custer and Sitting Bull*. The first is drawn from Custer's memoires, which were written in serial form for a magazine. The second is drawn from Sitting Bull's speeches, songs, interviews, and military tribunal transcripts. I quote his personal song as it was recorded in 1920 by someone who knew him. The third text is simply the final note that Custer wrote asking for help—that text determines the rhythm of the battle scene, which is otherwise instrumental. And the final text I got from an astrology book whose author claimed that the spirit of Sitting Bull revealed to him what Custer's ghost said to him after the Battle of the Little Bighorn. It's a beautiful text, I didn't mind where it came from. [This section is on the CD accompanying *Musicworks* 101.]

GY: You have done some work in electroacoustics. Can you comment on the approach that you take to sound on its own, with no instruments present?

KG: Well, I *don't* approach sound on its own, which is why electronic composers refuse to consider me an electronic composer. Everything I do is MIDI, and that's the only way I can get the pitches I want with the rhythms I want. Most electronic composers seem to have a prejudice against that way of working, and that's their tough luck. I'm always writing for an instrument. I've taken to saying that I compose pieces for acoustic instruments that haven't been invented yet. That seems to shut up some of the criticism.

The Planets

GY: You produce plenty of inventive music for well-established instruments, as well. What approach are you taking to your new piece, *The Planets*, for the Relache Ensemble?

KG: That's a programmatic piece in which the structure, or rather process, of each section of the piece is determined by the way the corresponding planet works. The only movement in which I could really be spontaneous is "Uranus," because Uranus is the planet of unexpected events. [*The Planets*] is a ten-movement piece.

GY: Because there are ten planets?

KG: Because there are ten astrological planets.

DM: I always thought it was funny that when I studied astronomy, we actually used the signs of the Zodiac as short form for all of the planets. Are you still using Pluto, now that the astronomers have decided it's not really a planet?

KG: I was born with the sun exactly square with Pluto [at a ninety-degree angle]. So, nobody's going to tell me that Pluto doesn't exist! I've been dealing with Pluto my entire life! I'd love to make it go away—except now I'm beginning to benefit from it [laughs].

GY: What does Pluto mean, astrologically?

KG: Pluto is the planet of transformation and death and rebirth and all of that. And since it's such a slow-moving planet, it's a generational thing. So the generation born with Pluto in Leo, which is the sign of creativity, has had to deal with all this transformation of the idea of creativity. They say the generation born with Pluto in Cancer had to go through the world wars, and being uprooted from their homeland, because Cancer is all about where your home is. And so it destroyed that generation's sense of home. Then after Leo, it went into Virgo around 1957 and all the people born in that next period became obsessed with jobs, and their jobs started getting outsourced and their sense of work became transformed during our lifetime. Pluto was basically in Leo from 1935 to 1956, a little bit into '57, I think. For that generation, our ideas of creativity got all messed up, and transformed, and unreliable. You had to completely change your ideas about that part of life.

By definition, creativity has to break through whatever our definition of the world is. Any creative insight is going to prove something is not what we thought it was, prove the world less limited than we thought. And so you can't set up a grid and have everything in place and then expect creativity to happen.

There is a certain amount of anxiety involved in creativity, in pushing yourself so hard that you don't know what you're going to do. You think you can't solve the problem, and then you go to sleep, or you get on the bus or something, and all of a sudden something comes to you and you realize that you've been thinking about it the wrong way. If you want to be an artist, you have to sign yourself up to go through that. And just know that something is going to come along. If you had the sun exactly square in Pluto, like me, there was no escape. That was what I was going to spend my life dealing with. I had Pluto in the Ninth House, which is the House of Theory, among other

things, and Philosophy. So I've had to spend my life trying to figure that all out and to justify it and write about it and define it. Other people can just maybe live it and experience it and try to work around it, but I had to sit down with a pencil and paper and figure out how to say it, what was going on.

DM: Is this through your music or otherwise?

KG: In every way. I think, for me, it would have been almost impossible to see where to go with my music without theorizing my way into it. I don't think I could have escaped being a critic in some sense, even if I had wanted to. I took a lot of philosophy in college and a lot of aesthetics and I couldn't figure how to compose without figuring out in words what the purpose of it was and how it worked. I don't like to call myself a theorist, because music theory is not what I'm talking about, but just the theory of how creativity works and what the purpose of art is within the current situation and all of that. That was all stuff I had to deal with before I could decide what kind of music was the best kind to write today.

DM: Does the content of *The Planets* reflect this?

KG: It represents my own horoscope chart. Holst's *Planets* was astrologically conceived as well, though a lot of program notes make up a story about how he was portraying Roman gods. It's actually kind of a portrait of Holst. I don't know what signs his planets were in, except that he was a Virgo. I have a very weak Mars in my chart, so my Mars movement is not the kind of aggressive, violent Mars that a lot of other people would have. It's kind of a whiny Mars [*laughs*]. It ends up being my own experience and understanding of that planet.

The sun movement is like any other sun-inspired work, like the sunrise from Ferde Grofé's *Grand Canyon Suite.* Anything having to do with the sun is always going to be a crescendo, because there's a sunrise. And so it starts off as an additive process and it keeps getting longer and longer and the chords keep getting higher and higher, very linearly. That's our experience of the sun. The moon movement goes through several different phases, a new one every thirty or sixty seconds. The rhythmic phasing process continues, but the materials suddenly change. I'm trying to show a transformation in each movement, so none of these movements ends up the way it starts out. The hardest one to write was "Saturn," because it had to start out bleak and dissonant and motionless, and gradually morph into something exquisitely lovely.

INFORMATION ONLINE:

Visit: <www.kylegann.com>.

The Planets: Sun

The Planets: Saturn

Excerpts from *The Planets* (1994-08)

RÉSUMÉ FRANÇAIS

French to come. Kyle Gann, self-described "pitch and rhythm guy," expands the perceptions of listeners and performers in both directions. He has explored multiple tempos in his music, as well as microtonal tunings. He has written extensively about music in the twentieth century, and since 1997 has taught music history and theory at Bard College in New York State. In 2007 he was invited to present the keynote address at the conference of the Canadian New Music Network, held in Winnipeg, where he spoke about the long tail effect, providing an empowering interpretation of current distribution trends for unfamiliar forms of music. While in Winnipeg, he spoke with David McCallum and Gayle Young of *Musicworks* about *Sunken City*, for Orkest de Volharding and pianist Geoffrey Douglas Madge. He also discussed the role of the astrological sign Pluto in relation to *The Planets*, written for the Relache Ensemble, and his composition process for *Composure*, for four electric guitars, which was