I have in mind a set of "symptoms" particular to American contemporary music, a resonance among certain composers and practitioners across an influential spectrum of 'forward-looking' artists. This syndrome includes the use of modal tonal forms, generally employing a lowered seventh scale degree; a concern for just intonation; a characteristic involvement with timbre or texture, in competition with melodic invention; and an absence of overarching rhythmic form (as found in sonata form or call and response singing). This syndrome may be found to a greater or lesser degree in the works of all of the 'minimalist' composers, and in the work of musicians influenced by minimal composition, such as early Sonic Youth and others working in 'rock' music.
I can't say that my early experiences with the violin were pleasurable, because I always thought the violin sounded so bad. I'm saying that I didn't practice much, if at all, or advance well, even with my own private teacher. An excellent young symphony violinist, Ronald Knudsen, started coming to my house when I was in high school, to teach me, but he soon found that I wasn't going to learn the licks. He advised a better instrument; he made me go back to scales; nothing worked. The saccharine 19th century salon pieces in my music book could have sung out, if I had played them "expressively," with vibrato; but I hated vibrato. Then Knudsen gave me some 18th century music, full of double stops, and I discovered what it was like to hear two notes sounding together.

Playing in tune, Knudsen urged, was a matter of playing slowly and listening carefully. And playing ever so accurately in tune made the music sound so much better. Whatever you can play slow, you can easily play fast, he always said. When he found that I was responsive to the intonation exercises he gave me, Knudsen brought me a book on acoustics. I was playing two-part harmony from the Bach Chorales. Then we started spending my whole lesson on long conversations about the harmonic series, scales and tunings, intonation, long durations, careful listening, and the relationship between these ideas and disciplined attention to fundamentals.

Knudsen's wife was Japanese; perhaps this was linked to his almost 'Zen' approach to practice. He passed on to me exercises that he had found startling: could I hold one bow stroke for a half minute?—a minute? How closely could you learn how long a half minute was? Could I play in tune? I mean, really in tune? And more than one note at a time, which was the only way to really hear intonation most clearly? Were there other notes, scales, harmonic progressions, which could be understood through intonation? If I were really careful, it might take me a long time just to get my violin really in tune. And anything that I could play slow I could play fast; the secret of playing well was playing more slowly.

Later, in college during the late 1950s, I became interested in contemporary music. I was profoundly affected by a John Cage performance with David Tudor, and by hearing the young Karlheinz Stockhausen speak. David Behrman, Frederic Rzewski, and Christian Wolff were all graduate students at the university, and I went to their performances. Rapidly, I became involved in the discourse of contemporary composition.

I also cast about to find more polyphonic violin music to play. In 1959 (shortly after I met La Monte Young, then a music graduate student at Berkeley) I stumbled upon the Mystery Sonatas of Heinrich Ignaz Franz Biber, a composer almost unrecognized today, whose adventurous explorations of timbre, tonality, and instrumental technique are the most startling of the 17th century. The sixteen Mystery Sonatas are written for scordatura violin, meaning that the instrument is to be tuned in an idiosyncratic manner for each piece.

Biber's music transformed me for the first time, my violin sounded truly wonderful. It rang and sang, and spoke in a rich soulful voice—the timbre of the instrument, clad in Biber's coat of many colorful tunings, catching and refracting every note differently—reinventing, thereby, the function of the key pitch, the fundament of the chord. I perceived Biber's music as having been constructed according to timbre, not melody. The startling originality of his other inventions certainly supported this thought: that Biber had completely reformulated the basis for music composition, around timbre. Biber, after all, had been inventive with timbre as Gesualdo had been with chromaticism; he had many different tunings, unorthodox performance instructions, and even occasional polytonality, unparalleled until the time of Charles Ives. For me, my interpretation...
his work was confirmed by Biber’s use of ostinati, long pedal tones, simple chord progressions, and open fingerings.

Pursuing my Baroque discoveries further, I found that 17th century violin technique had been different from the 19th century bravura style that is almost universal among classical string players today; the 17th century style is closer to hillbilly or bluegrass fiddling technique. The bow stays down on the strings more, and vibrato functions more as an embellishment than as an adjunct of every note.

Ronald Knudsen had always guided me to play in exactly accurate intonation by playing slowly and carefully, and listening scrupulously. The slower and more exquisitely in tune I played the Biber sonatas, the more they sang out. My body merged with the body of the violin; our resonances melted together in rich dark colors, harsh bright headlights. Slower; slower.

The first recording of Indian music I heard was an Ali Akbar Khan performance on Angel Records, in late 1959. It was electrifying; my recollection is vivid. I had never heard the classical music of another culture before; ethnomusicological recordings were extremely unusual in this time.

The underlying relations among melodic and rhythmic functions, and the role of pitch in establishing a key tone (Sa), are not so terribly different in Indian music and Western common-practice harmony; and the emotional compass of Indian music is fairly coherent and legible to the Western listener (more so, one might say, than that of Arabic singing, for instance). It was apparent to me upon first listening that the element which enabled the acute focus and unusual emotional intensity of this music was the drone, which expanded attentiveness to intervallic relations while eliminating the function of harmonic motion.

The drone, as a quintessential of Indian musical logic, plays much the same role that the progression V > I plays in Western music. Each is a core, an armature, which defines the listener’s sense of the musical events. Western music, with its ever-present investment in progression, animates a sense of absence — of suspension or expectation. This irresolution corresponds to the conflict that provides a forward impetus in narrative story telling. Indian music also conveys feelings of suspension and resolution, but much differently — and always in the presence of its object. Its operative fig.
Get over debilitating moral conservatism with the filthy audacity of truly alternative music!

Write today for a free catalogue of original cassettes and CDs.

audifile Tapes.

Perhaps the last barrier between you and heaven knows what.

Carl Howard—audifile Tapes
209-25 18 Avenue, Bayside NY 11360 USA

lilgrey@aol.com / lilgrey@lr.netcom.com

complete online catalogue available on request (.pdf format)
ure is balance, or repetition, but not absence and conflict.

My response to this music was different from that of my composer friends, all of whom discovered Indian music at about the same time. What most of them found exciting in Indian music was its modal, rhythmic, and ornamental structure. On the other hand, I had been strongly focused upon the intersection of intonation, slow playing, and intervallic (rather than harmonic) listening for some years, and found in Indian music a vindication of my predilection for drone-like performing. The urge which budded in my own playing, under the influence of Indian music, was for working in an ensemble context. Though I had played in classical-music school orchestras, I had always done 'my own' music alone. Feeling the leveraging capability of drone playing in Indian music made me imagine what other new musics might spring from a drone, set within a less authoritarian and tradition-ridden performance idiom.

Around the time I left school and moved to New York, my friend La Monte Young was playing a series of improvisational concerts with several other musicians at a small gallery, called '10 - 4.' I was enraptured to find that he had swerved off in an 'oriental' direction: while Young played saxophone (somewhere between Bismillah Khan and Ornette Coleman), Angus MacLise improvised on bongos, Billy Linich (Billy Name) strummed folk guitar, and Marian Zazeela sang drone. All in all, those were hysterical and overwrought concerts; they went on for hours in overdrive, with frequent breaks for the musicians to refresh themselves offstage or in the john. The music was formless, expostulatory, meandering; vaguely modal, arrhythmic, and very unusual; I found it exquisite.

What I heard in this music was two parts of what I later saw as three. First, I heard an abrupt disjunction from the post-Cagean crisis in music composition; here the composer was taking the choice of sounds directly in hand, as a real-time physicalized (and directly specified) process—in short, I saw redefinitions of composition, of the composer, and of the artist's relation to the work and the audience. As a response to the un-choices of the composer Cage, here were composerly choices that were specified to a completeness that included and concluded the performance itself.

Secondly, I also heard, a composition process which drew upon established vocabularies of traditions, abstracting (or appropriating) the foundations of different musicological (and ethnomusicological) structures, and which worked outward from these linguistic taproots to articulate a (comprehensible) voice in a (new and) invented musical language.

What I did not hear was perhaps the most obvious part of what had appeared here, which was simply that Young had torn a page out of his own history as a jazz musician. He had played, in fact, with Ornette, with Don Cherry (who since has certainly 'gone ethnic'), and with others, as a young sax player in the L.A. area. The black players had tried to get Young to 'swing;' he would not (or could not), and (like other white '50s jazz musicians in California) went 'cool.' Young, characteristically, went cooler than any of the rest of them, and started incorporating cool, long spaced-out tones in his classical pieces. His early 'String Trio' is a kind of hyper-cool California modern classical piece. It was a
point of pride, with Young at this time, that he was slow and cool, which brought him to the point of a shared taste with me. Slow, cool, and (which neither of us would have owned up to) nerdy.

Back to the 10-4 Gallery concerts: Though their music was certainly not cool at this point, the group was if nothing else extremely ‘way-out.’ I talked to Young, and began to play with the band after the 10-4 concert series ended. Billy moved over to the Factory, taking the legend of the cool, long-duration esthetic with him (it fell on such fertile ground there—where shortly it showed up in Andy’s early movies).

For the first month I played an open fifth drone. This made Young ecstatic, as he had already composed a piece, ‘Composition 1960 #7,’ which was nothing more than a perfect fifth, marked ‘to be held for a long time;’ and the onus that the ensemble’s work might appear to resemble ‘jazz improvisation’ was lifted from him by the device of this nominal contiguity with his neo-dada composition period. Zazeela also held a drone, though it was clear from the first that my presence would introduce entirely new standards of attentiveness to pitch and stability.

John Cage’s work, and the activities of Fluxus (which were going on all around us), appeared to bring modernism, and the project of an authoritarian musical form based on the sanctity of the score, to a halt. La Monte Young had become notorious as an avatar of this modernist collapse, particularly through his neo-dada compositions (which incorporated unobservable events, were sometimes performed before they were composed, and otherwise exploited logical and textual paradoxes and aporias of the composer-to-performer relation).

As ten (and again twenty-five) years later with painters, the question became: what was the composer to do, following this symbolic dismantling of the progressive modernist enterprise? Even now, 35 years later, that moment of fulfillment and crisis stands as the zenith of the modernist composer-oriented enterprise (which has ever since spilled over into mannered academic music and various retrogressive pseudomodernisms). So again, what was the composer to do?

There were three pathways that made sense to the performers of ‘Dream Music,’ or the ‘Theater of Eternal Music,’ or ‘The Dream Syndicate,’ as I sometimes called it. Happily, what each of these solutions shared was a solid opposition to the North Atlantic cultural tradition of composition.

The first was the dismantling of the whole edifice of ‘high’ culture. Also around this time, I picketed the New York museums and high-culture performance spaces with HenryFlynt, in opposition to the imperialist influences of European high culture. More than that, I had strong sympathies with the aims of Flynt’s program, which amounted to the dismantling and dispersion of any and all organized cultural forms. At the time I was also a part of the ‘Underground Movie’ scene, which (as I saw it) reconstituted the movies as a documentary form—a merging of life-aims with movie production. Other counter-culture components of the Dream Music picture were our anti-

The music was not to be a “conceptual” activity; it would instead be structured around pragmatic activity, around direct gratification in the realization of the moment, and around discipline.

bourgeois lifestyles, our use of drugs, and the joy which John Cale and I took in common pop music. Down this pathway there were other fellow travelers, like Andy Warhol and Lou Reed; it led straight to the Velvet Underground, and the melting of art music into rock and roll.

The second solution was to dispense with the score, and thereby with the authoritarian trappings of composition, but to retain cultural production in music as an activity. The music was not to be a ‘conceptual’ activity (neither in the sense that Fluxus had exhaustively realized the conceptual approach, nor in the sense that ‘conceptual art’ was to retrace a similar terrain seven years later); it would instead be structured around pragmatic activity, around direct gratification in the realization of the moment, and around discipline.

For La Monte Young, in the longer run, there came out of this a rigid conviction that discipline and tradition should dominate. He became an acolyte of the great Indian singer Pandit Pran Nath to more fully realize this end. For my own part, though, I viewed our ‘tradition’ as an artifice of con-
to LISTENING, again working 'on' the sound from 'inside' the sound. Here I was to contribute powerful tools, including a nomenclature for rational frequency ratios, which ignited our subsequent development.

Whenever any of us altered our performing premises in the slightest way, our ensuing discussion brought every justification or objection by any member of the group to the surface. In this way it became apparent that Young's conception of the drone, as relating to his own prior compositional activity, was opposed to my own grounding of the drone in an idiosyncratic reading of the experimental violin literature of the early Baroque. However, there was a baseline which stabilized the group—our (then) shared conviction that the collaborative composer/performer identity was the way to proceed (historically), and that the mechanism which could make this congruence fruitful would be attention to, and preoccupation with, the sustained 'sound itself.'

At the point of my arrival in the group, the 'sound itself' was 'way out,' which was incontrovertibly good, but this 'sound itself' had no particular sustained structural integrity or richness. At first, as co-drone (on violin) with Zazeela (on voice), I played only an open fifth, as I have mentioned. After a month or so, however, I suggested that I might also play another note. What should it be?—And so began our extended discourse on the advisability of each of the various scale degrees. But the evolution of a new argot for this discourse only really got into high gear a month later, after I had started playing the third drone note (which we agreed would be a major second or ninth), and our discussions moved on to the fourth drone note.

In keeping with the technology of the early 1960s, the score was replaced by the tape recorder. This, then, was a total displacement of the composer's role, from progenitor of the sound to groundskeeper of its gravesite. The recordings were our collective property, resident in their unique physical form at Young and Zazeela's loft, where we rehearsed, until such time as they might be copied for each of us.

The third route out of the modernist crisis was to move away from composing convenience, which supported the discipline required by our performance practices. After all, we played together as a group several times a week for about three years, without pay or encouragement to speak of other than our own collective conviction and determination.

Our 'tradition' was centered in this constructed fiction: that the sound we made had flowed, and would flow on, forever. Young's elitist temperament was much abetted by this absolutist conceit, which for others of us was always usefully picaresque precisely to the extent that it was unthinkable.

At the time, when we played together it was always stressed that we existed as a collaboration. Our work, together, was exercised 'inside' the acoustic environment of the music, and was always supported by our extended discourse pertinent to each and every small element of the totality, both as to each person's performance (the inexorably evolving 'improvisation') and as to the ideas which could be attached to the overall sound image. Much of the time, we sat inside the sound and helped it to coalesce and grow around us.

In keeping with the technology of the early 1960s, the score was replaced by the tape recorder. This, then, was a total displacement of the composer's role, from progenitor of the sound to groundskeeper of its gravesite. The recordings were our collective property, resident in their unique physical form at Young and Zazeela's loft, where we rehearsed, until such time as they might be copied for each of us.
Microstoria "snd" lp & cd
A Minor Forest "flemish
Altruism" lp & cd
Oval "diskont" lp +12" & cd

Directions in Music by
Bundy Brown, James
Warden, and Doug Schari

Lp & cd
also available records by
Tortoise, Freakwater, The Sea & Cake, Tray
Am, Gaunt, & More
lpssped, Al
9ppd, cd9ppd
THRILL JOCKEY
box 476794 Chicago Il 606
I myself might have been content with a major or minor third, for our third drone tone; the major third is particularly plangent in Biber. Young's prejudices, though, came out of contemporary classical training and jazz, and he opposed the major or minor third, preferring second degrees. Ok; anyway, our new interval was not just a fifth-of-a-fifth (or a third harmonic of a third harmonic), but also and more importantly it was a pure major second, and I was happy to tackle this difficult interval for a month or so. Meanwhile, at this time Young continued to blow lots of different notes on the soprano sax, often playing in Dorian mode.

I played two notes together at all times, so that I heard difference tones vividly in my left ear. The major second, as a consonant interval, has a very deep difference tone, three octaves below the sounded tones. Any change in the pitch of either of the two notes I played would be reflected in a movement of the pitch of the difference tone—but the difference tone would move eight times as fast as the actual pitches. I spent all of my playing time working on the inner subtleties of the combination tones, the harmonics, the fundamentals, and their beats—as microscopic changes in bow pressure, finger placement and pressure, etc., would cause shifts in the sound.

After a while I needed to explain what I was doing to the others, especially as Young had suggested looking for a playable seventh degree. The lowered minor seventh, which he referred to as 'bluesy,' might—it seemed to me—be identical with the seventh harmonic. The seventh harmonic! How exciting it would be to incorporate accurately tuned intervals which simply do (did) not occur in Western music? I played a seventh harmonic to Young, and he felt it might indeed be the 'blue' tone; but how does one tell whether two intervals are the same?

I launched an explication of the scale degrees and their relation to simple numerical frequency ratios. From this point of understanding, it readily followed that we might construct a system of intervals based on the prime numbers 3 and 7, rather than 3 and 5 (which are the foundation for the ordinary diatonic and chromatic scales). The simple arithmetic of composite scale intervals provided us with the makings of a nomenclature, which soon evolved into a fully articulated patois of the Dream sound.

From this point on, it was evident that there was an incipient technology and a systematic elaboration of our whole idiom available to us, should we only be able to attend more precisely to pitch and the 'inner' timbres of combinations of tones—that is, if the group could share more with my violin drone. At this time I began using amplification, competing for dominance with the saxophone; Zazeela's intonation (and the thrill of her vocal timbre) improved sharply over the next six months to a year.

John Cale introduced himself to Young, of whom he knew through his study of the avant-garde. Young suggested that he sit in with our group. From that point, with us two string performer/composers (amplified, of course), as well as Zazeela's voice, the drone element became incontrovertibly dominant. Within a few months Young gave up playing saxophone forever and turned to the voice, for its flexible intonational control. Of course, for fun we used various
other instruments from time to time, but the core group became two strings, two voices, and (with declining frequency) Angus MacLise's hand drums.

The quality of listening inside the sound, once our playing began to approach rational frequency ratios very closely, became different from other listening experiences. Our unfamiliar intervals, built on tones and timbres which are alien to the vocabulary of 20th century common practice, were surprisingly sonorous-dissonant but not discordant. Ripples of beats, in various ranges of the frequency spectrum, emphasized various aspects of the performance—its focus on timbre, its demands for technical accuracy, and its engagement with rhythm as an aspect of pitch. As I put it at the time, 'Pitched pulses, palpitating beyond rhythm and cascading the cochlea with a galaxy of synchronized partials, reopen the awareness of the sine tone—the element of combinatorial hearing. Together and in pairs in all combinations, the partials combine. The ear responds uniquely.'

We lived inside the sound, for years. As our precision increased, almost infinitesimal pitch changes would become glaring smears across the surface of the sound. I found that I had to make a very minute pitch adjustment to compensate for the change in the direction of travel of the bow. When John Cale's viola and my violin began to fuse, as though smelted into one soundmass, I felt that the Dream Music had achieved its apogee. Zazeela's voice had grown rock hard, unerring in its pitch control, and unique in its hugeness and stridency of character. The totality of the sound began to outstrip any of our expectations, and to move into new, larger territories with ever more unusual intervallic combinations.

On December 19, 1964, I stepped outside the Dream Syndicate for the first and only time during that decade. On that day I recorded solo the tracks of FOUR VIOLINS, one after the other, bouncing back and forth between the two tracks of my stereo reel-to-reel recorder. By the end of two hours I could hear my intonation slipping badly, and I stopped. The first two 'takes' had almost been erased in the mixing, but I thought that the tape sounded pretty good, discounting the inaccuracies in the last track.

Why were there no other solo recordings of Dream Music strings? Because I always saw this music as inhabiting a communal ground; even FOUR VIOLINS seemed like a gesture which should remain personal, as it has for over thirty years.

The Dream Music tapes on which John Cale and I sounded best were 'saved' by Young and Zazeela, who have never again permitted them to be heard. After 25 years, by which time two sometime participants in our group, Angus MacLise and Terry Jennings, were already dead, Young finally agreed that we might begin having some copies of the tapes—but his prior condition was that each of us sign an agreement that he, La Monte Young, was 'the composer' of the 'pieces.' At their core, the hundred or so recordings of Dream Music emblematically deny 'composition' its authoritarian function as a modern activity.

The music had been heard live, originally, in a score of concerts, some in very influential settings. It was remembered, approximated, and echoed in aspects of others' work. An absorption with—and the
employment of—just intonation, along with the use of the seventh harmonic, slipped into place as hallmarks of a certain approach. After MacLise, Cale, and then I departed from our group (by the end of 1965), Young himself still arranged occasional concerts. Sometimes he made 'Dream'-like recordings, and he announced new 'works.' Long duration music was exploited and extended by important composers such as Charlemagne Palestine, Phill Niblock, and Rhys Chatham (through whom it passed into the New York rock idiom).

By 1987, I realized that La Monte Young wanted me to die without hearing my music. I was fascinated by the peculiar cultural discontinuity which the Dream Music had come to represent: on the one hand, it had entered the American musical tradition, somewhere near its core, and influenced many people in many ways. On the other hand, it existed privately, for me, and I first had raised it. But I the rettyenting rack.

Pitched pulses, palpitating beyond rhythm and cascading the cochlea with a galaxy of synchronized partials, reopen the awareness of the sine tone—the element of combinatorial hearing. Together and in pairs, in all combinations, the partials combine. The ear responds uniquely.

as a unique performance capability, one which years of rehearsal had worn to my fit like an old shoe. But most particularly, as it had emerged, the music at the heart of this was unheard and unhearable.

Paul Arthur once commented about Andy Warhol's 'Empire' that it was a film which almost everybody would feel they knew, though almost nobody had really watched it. Somehow the Dream Music had become a similar object; and then I saw that it could be reconstructed. The popularity of postmodernism, and especially the work of Michel Foucault, suggested the potential legibility of a musical work that would address and incorporate the paradoxes of cultural history which circulate so richly within this music. In my series of compositions, EARLY MINIMALISM (which uses the field's after-the-fact nomenclature for this musical style as its epigraph), I have consequently resituated the composer specifically as a problematic armature of historical agency.

Where did minimalism ever come from?

Polyphonic music; all music in the history of thematic development, from the early common practice period through the dodecaphonic and serial music of this century; and music generated by idiosyncratic 'systems' of composition or performance—all these reflect an occupation with formal structural concerns. Hardly any music so foregrounds (and ironically so conceals) formal structure as mid-twentieth century serial music. Minimal music represents an inversion of this condition, in resorting to ultrasimplistic formal structures, which dominate the surface of attention—only to vanish within the substance of the music as one enters.

Musical minimalism reduced and underlined its formal boundaries in part so as to make modes of attention malleable—to defuse the hearer's sense of expectation. Further, minimalism stood for a contentedness with the ideal and preoccupational aspects of the specific sound itself. The formal and immaculate aspects of minimalism served the interests of modernist criticism; on the other hand, its manipulations of attentiveness and consternation configured an intrinsically anti-compositional stand which, for 1960s modernism, was inconvenient, even impolite.

That's what 'minimalism' was at first conjured up to do: to substitute repose, or wily humor, for all the claptrap and institutional appurtenances of art. But of course minimalism was never inherently an oppositional culture. You see how minimal painting or sculpture is used today, as decoration for national and corporate projects. Since it strove to be neutral, minimalism could be co-opted by anybody.

FOUR VIOLINS had multiple resonances in the cultural politics of its time. At the cultural distance of twenty years from December 1994, a new vibration stirred; out of the suppression of the Dream Music recordings there welled a tone of nostalgia, of cultural absence, of desire and loss. These were the impetus for my series of compositions EARLY MINIMALISM (1985-95). Now there is even more to be said; in SLAPPING PYTHAGORAS (1995) I have begun to exhibit how the co-option of music by an aristocratic cultural program such as that of Young is not simply an artifact of late modernism, but is the residue of a dialectic which was set in motion by others already now dead for 2400 years.
I can't say that my early experiences with the violin were pleasurable, because I always thought the violin sounded so bad. I'm saying that I didn't practice much, if at all, or advance well, even with my own private teacher. An excellent young symphony violinist, Ronald Knudsen, started coming to my house when I was in high school, to teach me, but he soon found that I wasn't going to learn the licks. He advised a better instrument; he made me go back to scales; nothing worked. The saccharine 19th century salon pieces in my music book could have sung out, if I had played them "expressively," with vibrato; but I hated vibrato. Then Knudsen gave me some 18th century music, full of double stops, and I discovered what it was like to hear two notes sounding together.

Playing in tune, Knudsen urged, was a matter of playing slowly and listening carefully. And playing ever so accurately in tune made the music sound so much better. Whatever you can play slow, you can easily play fast, he always said. When he found that I was responsive to the intonation exercises he gave me, Knudsen brought me a book on acoustics. I was playing two-part harmony from the Bach Chorales. Then we started spending my whole lesson on long conversations about the harmonic series, scales and tunings, intonation, long durations, careful listening, and the relationship between these ideas and disciplined attention to fundamentals.

Knudsen's wife was Japanese; perhaps this was linked to his almost 'Zen' approach to practice. He passed on to me exercises that he had found startling: could I hold one bow stroke for a half minute?—a minute? How closely could you learn how long a half minute was? Could I play in tune? I mean, really in tune? And more than one note at a time, which was the only way to really hear intonation most clearly? Were there other notes, scales, harmonic progressions, which could be understood through intonation? If I were really careful, it might take me a long time just to get my violin really in tune. And anything that I could play slow I could play fast; the secret of playing well was playing more slowly.

If I were really careful, I might take me a long time just to get my violin really in tune. And anything that I could play slow I could play fast; the secret of playing well was playing more slowly.

I also cast about to find more polyphonic violin music to play. I 1959 (shortly after I met La Mont Young, then a music graduate student at Berkeley) I stumbled upon the Mystery Sonatas of Heinrich Ignaz Franz Biber, a composer almost unrecognized today, whose adventurous explorations of timbre, tonality, and instrumental technique are the most startling of the 17th century. The sixteen Mystery Sonatas are written for scordatura violin, meaning that the instrument is to be tuned in an idiosyncratic manner for each piece.

Biber's music transformed me for the first time, my violin sounded truly wonderful. It rang and sang, and spoke in a rich soulful voice—the timbre of the instrument, clad in Biber's coat of many colorful tunings, catching and refracting every note differently—reinventing, thereby, the function of the key pitch, the fundament of the chord. I perceived Biber's music as having been constructed according to timbre, not melody. The startling originality of his other inventions certainly supported this thought: that Biber had completely reformulated the basis for music composition, around timbre. Biber, after all, had been inventive with timbre as Gesualdo had been with chromaticism; he had many different tunings, unorthodox performance instructions, and occasional polytonality, are unparalleled until the time of Charles Ives. For me, my interpretation.