MW CD 81

COMPOSERS SOMETIMES TAKE MORE THAN JUST INSPIRATION FROM PREDECESSORS THEY ADMIRE...

Comparrangetranscraboration

Rewriting Ruth Crawford Seeger

by Larry Polansky

ANALYSIS, SYNTHESIS, TRANSCRIPTION, COLLABORATION, ARRANGEMENT, COMPOSITION ... WHATEVER

"Each individual will have his own preferences in respect to what should be lost, modified, or preserved."—Ruth Crawford Seeger (All quotations are from *The Music of American Folk Song*)

Credit is a pernicious necessity of composition, and the composing life. Notions of "my" and "piece" have evolved as poorly understood and tangential artifacts of our collective psyches. Without real insight or vision, battles of artistic possession are conducted with arguments and tactics that insult our intelligences. Art is viewed by some not as a permacultural community garden but as a pesticide-ridden private cash farm. By "creating," we stake claims and reap the profits, entering historical "arenas" as gladiators prepared to slay opponents of our artistic primacy, at whatever cost to reason and collective well-being.

But best not to be too cranky about it. As *composers*, pretty much all we do is claim credit for our ecological niches—composting and mulching music's soil, tagging the harvested plants as our own. Arrangers, on the other hand, are tenant farmers: their skill is acknowledged and respected in the context of the owner's success. If the beauty and joy of arranging is getting less credit than deserved, the sordid reality of composition is getting far more. Arranging is surreptitious composition, composition surreptitious arranging.

Collaboration is another way of collectivizing the compositional farm, and is an elegant vehicle for moving us into the car-pool lane on our daily commute. Improvising, composing, publishing, performing, making software together—collaboration nicely defers the onus of "mine."

RUTH CRAWFORD SEEGER'S WORK AND ME

With this short article, I am writing for the first time about a lifelong activity of mine: rewriting and arranging other's music. This centenary year of one of our greatest composers and musicians, Ruth Crawford Seeger, seems an appropriate time to describe a few of my pieces that use her work as a starting point.

"Arranging" has been an occasional but consistent activity for me, not clearly distinguished from other means of making music. As a composer, I sometimes re-compose pieces that interest me, a collaboration in which my collaborator often takes no part. It's a musical act with no *a priori* rules.

Lots of composers have arranged the works of predecessors and contemporaries: Schoenberg / Brahms, Webern / Bach, Cage / Billings. In any musical idiom other than Western art music, this is not even odd. Hearing a song we like, we play it in our own way. At worst, the rewriting of "scores" does no harm. Bach's music is a renewable resource, unchanged—except perhaps, to the ears of a really perceptive listener—by Webern's arrangements. This kind of compositional recycling is a specialized form of what Pauline Oliveros calls "deep listening." As composers, we can also focus on the musical ramifications of another's work within the framework of our own experience and activity.

"... With few exceptions, the singer sets the dramatic mood at the beginning of the song and maintains that mood throughout ... The singer does not try to make the song mean more, or less, than it does ... The tune makes no compromises, is no slower nor faster, nor louder. There is no climax—the song just stops."
—Ruth Crawford Seeger

Over the years I've arranged the work of lots of other composers and musicians; from the Carter Family to James Tenney and Howard Skempton, from Shaker music to jazz standards, from Ron Nagorcka to Dirk Rodney. It's fun, it's fascinating, and it feels strangely necessary. For me it is an explicit acknowledgement of one of the reasons I became a musician in the first place—to experience the interconnectedness of our community of ideas and our co-evolution as creative humans.

RUTH CRAWFORD SEEGER

This year we give long overdue attention to Ruth Crawford Seeger (RCS), an artist whom I believe to be one of the twentieth century's most interesting, visionary, and important composers. Fortunately, with a biography by Judith Tick (*Ruth Crawford Seeger, A Composer's Search for American Music*), a book of musical analyses by Joseph Straus (*The Music of Ruth Crawford Seeger*), and an ever-growing body of recordings and score publications, her work has become more available and knowable, although there are still some major lacunae (1).

I first encountered RCS's music, as many of us did, in her String Quartet. I'm not sure, but I seem to remember standing in a cafeteria line with James Tenney in Toronto, probably around 1975 or 1976 (for some reason I recall that we were both holding small containers of yogurt), and Jim telling me that I should check out that piece (he knew of my interest in United States music—I'd probably been ranting about Billings or Shape Note or something at the time). Hearing the quartet, I was immediately hooked, and resolved to learn as much about RCS and her work as I could. I'm still working on that project.

At that time, there were—aside from the String Quartet—few available recordings of her work (portions of the Preludes, the *Study in Mixed Accents*, a recording of the *Sandburg Songs*). What little information existed about her life was mostly inaccurate. Her work between 1935 and 1954, primarily with American folk music, was poorly understood, at best. I don't think many people still really appreciate the impact, vision and variety of RCS's work in her final twenty years, even though it is beautifully documented in Judith Tick's recent biography. I was astonished when I first learned that such an amazingly experimental U.S. composer—a U.S. woman composer—had been so effectively excluded from history. I'm no longer so naive, but remain astonished, as I was when I undertook a large project to uncover the work of another important composer from the 1930s, Johanna Magdelena Beyer. (In the last few years, there have been several festivals of Beyer's work in the U.S., Europe, and Australia, and many single performances.)

"Passed on year after year from one person to another, a majority of the songs can be said to have been modified in many ways, and to styles of performance in the singing any one song can differ radically, with the result that the lineage of the song is at times hard to detect."
—Ruth Crawford Seeger

SACCO, VANZETTI

My fascination with and immersion in RCS's work gave rise to a number of pieces in the ensuing years. My first arrangement was *Sacco, Vanzetti* (for mandolin, mandola, mandocello, guitar, and soprano). It arose from a need to create pieces for an ensemble I was working with in the San Francisco Bay area in the 1980s. A group of guitarists and mandolinists (myself, Paul Binkley, Doug Hensley, Dana Rath, and others) had formed, along with composer-pianist-harpist Alexis Alrich, an ensemble called New Music for Plucked Strings. Working from the facsimile publication of RCS's *Two Ricercari* (sometimes called the "two political songs") in an issue of Peter Garland's *Soundings*, Alexis and I decided each to arrange one of the pieces. Alexis's work on RCS's *Chinaman, Laundryman*, is a lovely, faithful arrangement, in which the single-line piano part is hocketed among the various instruments (mandolin, mandola, mandocello, troubadour harp). The voice part was left unchanged. I took a different approach in my version of RCS's *Sacco, Vanzetti*: I left the voice part intact but used the relentless block chords of the piano part as jumping-off points for melodic and heterophonic instrumental activity. In my arrangement, some version of the original's downbeat chords is usually retained, but everything else in the long, complex, and difficult score is my own instrumentational and musical fancy.

"The accompaniment rarely stops from beginning to end of the song. It is the business of the accompanist(s) not only to keep going throughout each stanza, but to take up the slack during breathing spaces at phrase-ends, and at times to provide interludes between stanzas. Most interludes in the songs in this volume are fairly short, showing slight interstanzaic variation in length."
—Ruth Crawford Seeger

Measures 39–71, *Sacco, Vanzetti* (Polansky arrangement). Staff order is, from the top down: soprano, mandolin, mandola, mandocello, guitar.

We performed this pair of works a number of times, with Susan Narucki as soprano. It always interested me that Alexis and I had, without discussing it, assumed different "rules" for our arrangements. Everyone operates under a different set of listening assumptions, and these are expressed in surprising ways. We both treated the vocal part as a kind of sacred object. (Whenever I teach an orchestration class, one of my standard assignments is to have students rewrite Ives' songs for some ensemble and voice—the most fun have been those for string quartets. I ask them to leave the voice part intact, but do anything they want with the piano part. This has been a wildly successful exercise for the students; it seems to make composers out of people who didn't think of themselves that way, and leads to fascinating and beautiful results.)

For me, the homophonic piano part in *Sacco, Vanzetti* was, by a kind of strange topological transformation, equivalent to a free *heterophonic* realization of it. One of the beauties of RCS's music itself is this mystical extension of the heterophonic concept to include works like the *Ricercari*, the *Piano Study*, and the *Diaphonic Suites*. I'm not certain who strayed further from the original, Alexis or I.

LONESOME ROAD
(THE CRAWFORD VARIATIONS)

In 1987 I taught a class at Mills College on American music, in which I gave a lecture or two about RCS, using what little information and materials were available at the time (Mathilda Gaume's biography was an important source). One student, LeDonna Withaar, did a final project on RCS for the course, and pointed out a number of new resources, greatly clarifying for me the ontogeny of RCS's musical life. With the support of Mills, I curated a concert of RCS's work, perhaps one of the first of its kind. Working from the few published scores, and manuscripts from the Library of Congress and the Seeger Estate, a number of extraordinary musicians performed a large number of her works, including some of the folk-song arrangements in concert form.

"It has further been observed that two singers, singing the same tune simultaneously, may at certain points employ two levels of 'blueness' ... With a larger group, such as that in *Go Down, Ol' Hannah* this heterophony is striking."
—Ruth Crawford Seeger

The idea of performing RCS's folk-song arrangements (chosen in this case from *The American Songbag*, compiled by Carl Sandburg, and her own *American Folk Songs for Children)* came from my feeling that RCS's life and work were not quite as binary as had been thought. Her folk-music work and her "classical" compositions are of a piece, clearly emanating from a single, unified, yet broad-minded musical intelligence. Studying the seven piano arrangements she made in 1927 for Carl Sandburg's *The American Songbag*, while a student in Chicago, I was astounded by the harmonic inventiveness and formal maturity of the young Ruth Crawford (before she married). In playing the much simpler (but no less sophisticated) arrangements in the three American-folk-song books, I was floored by the compositional—or, perhaps—arranging intelligence.

One song from The *American Songbag* fascinated me most: the simple sixteen-measure harmonization of "Lonesome Road." In a number of performance-lectures that I did around that time about RCS, I would often end by performing that piece with a singer. Its harmonic language, beautiful voice leading, and deep subtlety seemed to offer remarkable insight into the mind of the composer. From the extraordinary care that she devoted to her arrangement of this simple folk song it is clear that she knew she was creating a little jewel that only a few might appreciate. And with all of this, it still sounds like simply a lovely folk-song arrangement.

In 1988–89, I took a leave of absence from my job at Mills to accompany my wife, composer Jody Diamond, to Indonesia to assist her in a year-long study of contemporary

Variation XL from *Lonesome Road.*

Variation III from *Lonesome Road.*

Ruth Crawford's harmonization of the song "Lonesome Road" from *The American Songbag.*

Indonesian composers (see her essay "There Is No 'They' There" in *Musicworks* 47). I knew that over the course of that year I would be travelling—and also waiting around—a lot. I decided to work on a long piece that would be as portable as possible. Variations have always interested me as a kind of primitive solution to the problem of form, so I ended up writing a set of fifty-one variations on RCS's folk-song harmonization, which I called *Lonesome Road* (*The Crawford Variations*).

In performance, the work is close to an hour and a half long. And it is difficult. Its first performances were by three Swiss pianists, each playing one of the three sections that each consist of seventeen variations. After premiering the piece in Zurich, the three musicians (Tomas Bächli, Urs Eggli, and Martin Christ) toured North America, including Toronto's Music Gallery. Martin Christ later learned the work in its entirety, toured with it as a solo pianist, and recently released a new recording of it on New World Records (2). Of everything I have done with RCS's work, this piece has perhaps the most tenuous relationship to her music. While several of the variations use her sixteen-measure harmonic progression architecturally, and some use the folk song's melody, many do neither.

Lonesome Road (The Crawford Variations) is rare in my work in that it uses neither the computer, experimental intonation ideas, or even a moderately formalistic approach. Each variation is a kind of fantasy, and though there are lots of formal ideas, large and small, throughout the work, I intended something quite non-formalistic. It was an enjoyable and playful exercise of musical chops and ideas that are not often invited into my work, but hang around on the doorstep nonetheless (3).

THE CASTEN VARIATION

The Casten Variation for ensemble or solo piano has an unusual history. Some years ago, working in the computer music language HMSL (co-written by Phil Burk, David Rosenboom, and myself), I became interested in extracting data from existing music as a basis for analysis, and then thinking about that data as a kind of primitive representation of the piece, perhaps for the purposes of making new pieces (4).

A confluence of interests and situations spontaneously created *The Casten Variation*. In 1993, I was teaching an advanced music theory class at Dartmouth, and we were exploring modes of analysis, from atonal theory to music cognition tools. At the same time, I was reading with interest the works of the visual statistician Edward Tufte, which suggested to me the exploration of musical analysis using the computer both as a mathematical-analytical and visualization tool.

In that same year of 1993, I was invited to give, at the Society for Music Theory's annual meeting (in Toronto, as it chanced), a response to a paper that Joseph Straus would be presenting there. Straus, professor of music theory at Queen's College, City University of New York, was presenting a paper that offered a clear and insightful set of atonal-theory analyses of RCS's work (he was working on what became the first analytical book on her music). The one piece that Straus decided not to analyze was the *Piano Study in Mixed Accents*, which in my opinion, is not only one of the great and pure shining examples of RCS' genius, but a wondrously mysterious combination of crystal clear musical gesture and obscured theoretical plan. It's also monophonic (the piano part is in octaves throughout), and short (under two minutes), so it seemed particularly amenable to formal computer analyses. Another thing that attracted me was RCS's own segmentation of the piece into clear phrases (accented sixteenth-note groupings) and five sections (delineated by rests). Like much of her music—and that of some of her contemporaries, such as Ruggles—the *Piano Study ...* is characterized by a use of palindrome (5) as well as a kind of statistical-probabilistic treatment of dissonance: wait a long time before you repeat a note. These were things that seemed like they might emerge in expected and unexpected ways from computer graphical analysis.

I input her score and began cranking out a variety of statistical analyses. The first thing I did was to show the piece as a "time series" (similar in style, I learned later, to RCS's own scientific interests in automatic melody transcription). I ran lots of measurements, some of them simple (such as interval and note frequency, length of phrase without repeating, etc. see diagrams on pg. 35) and some complex (the analyses end with a series of multidimensional scaling charts of the phrases under various morphological metrics of my own device (6)). I even had my students do an atonal set-class analysis of the phrase groupings (which didn't seem to turn up much). I looked at things by section and within the whole of the piece, and tried to find as many ways to visualize the music as possible. The process was fun—I'd write some program in HMSL to spit out data, and then pipe that into Excel, Systat, or some other statistical graphics program, and simply show the analysis in the form of graphs, charts, etc. I wanted to *envision* the data, not describe it, avoiding conclusions but trying to take a multi-perspectival visual approach to displaying the piece's form.

My response to Straus's paper was a ten-minute presentation of about forty pages of graphics, with almost no spoken explication. Bearing the title "Envisioning Ruth Crawford Seeger's *Piano Study in Mixed Accents*," it was meant as a response not so much to Straus's thorough (and more conventional) analyses, but rather to the precepts of music theory itself. I was trying to elucidate, not conclude; to question and illuminate, not explain and obfuscate. I've since presented this analysis a number of times to classes, in guest lectures, at conferences, and in other like contexts. I've never published it. The intent was performative—a brisk travelogue through the wilderness of theoretical concepts.

I'm a composer who uses theory in order to compose, or even just to ponder, but *not* to explain other composer's works—which I'd rather rewrite. After having done my graphical analysis, I realized that somewhere in the bowels of my software I had multiple descriptions not only of the *Piano Study ...* but of an infinite number of unique pieces that were in some way the same as their "parent." The data that interested me most were a set of similarity measures of each phrase to every other phrase, in terms of several morphological metrics which measured, in fairly complex ways, intervallic content and *contour*. I assumed that the work could be described completely by these distance measures, just as a city can be described in terms of all of the distances of each building from all the others. These distances were stored as a set of multidimensional scaling analyses. Multidimensional scaling, or MDS, is a common mathematical computer technique used in experimental psychology to reduce a complex data set (usually heuristically derived) of paired similarities (or confusions) to a simpler, usually two-dimensional representation. In a sense, it's a way not of comparing apples, oranges, and orangutans, but of attempting to visualize the similarity space that people perceive these things as inhabiting.

"At this point, the musician could join in the work with the laboratory specialist. He is used to working with diagrams ... though not with such accurate ones."
—Ruth Crawford Seeger

I knew of no way to take multidimensional scaling data and recreate a specific original data set (that seems to me to be more or less mathematically impossible), so I devised a simpler compositional method, using a primitive *genetic algorithm*. I wrote software to take the first and last phrases of each section in the *Piano Study ...* as fixed phrases of two to five notes, and to generate a set of other phrases which fit the following criteria to the similarity-distance data of the original *Piano Study ...* itself:

- *distance* to the first phrase by a weighted combination of two metrics, which I call the *Ordered Combinatorial Direction*, and the *Ordered Combinatorial Magnitude*, the first measuring contour similarity, the second interval similarity
- distance (in the same way) to the last phrase
- distance to the previous phrase (generated by the computer)

In other words, the computer tried to compose phrases whose relationship (in terms of intervallic content and contour) to all the other phrases was more or less the same as in the original piece. "More or less," because I reduced the "similarity matrix" to three similarity pairs. Although these constraints go a long way towards a reverse engineering of the multidimensional scaling analyses, it is clear that they are not the same. In fact, there is no guarantee that there even exist new phrases which will satisfy the criteria within any reasonable measure of error.

Fitting each phrase to these three criteria was difficult. I used a number of computer algorithms that automatically relaxed the error function proportionally to the number of trials, which often were in the millions. The software tracked these accumulated errors, and tried to find a sort of optimal fit. The metrics themselves were relatively weighted, and the weights were also optimized as the program tried to reconstruct the piece.

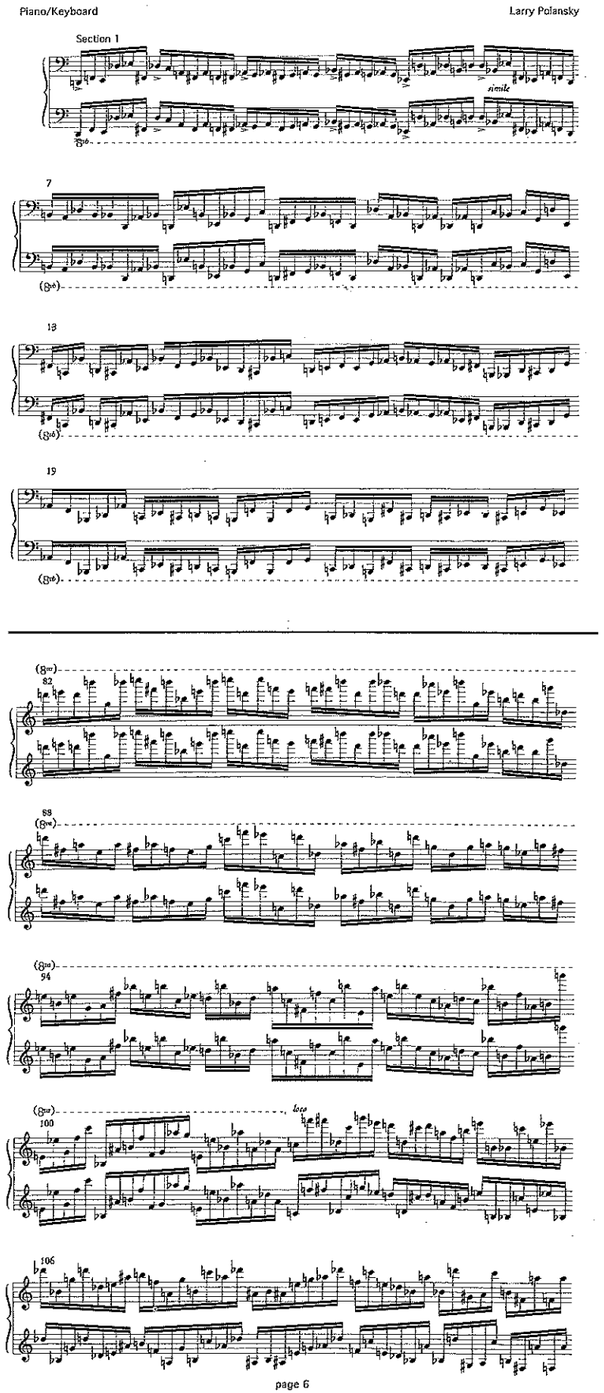
The new phrases were allowed to vary in note length somewhat, within certain constraints, which constraints increased the note lengths of the original's phrases. I made my piece five sections long, and the first and last phrases of each of my sections are the same as the first and last of the sections in the original. The pitch range is expanded to encompass the entire piano keyboard. My work is about six times as long as the original, with intermediary phrases interpolated in between the similarity measures of the original melodic phrases.

"Some simplification is, of course, inevitable."
—Ruth Crawford Seeger

Once the computer was finished (the final run took several hours of computing: I would tell my wife that my new piece was "cooking"), the new work was a lot like the original, formally and in other ways. My piece had no notes in common with the original (except for the fixed phrases). Also, the pitch- and time-stretching of the original closely resembled the typical use of a phase vocoder, and my friend Charles Dodge pointed out that I had simply performed *analysis* and *resynthesis*—admittedly in an unusual way. I like that characterization of the piece very much.

"Certainly, re-creation of the tune by the reader must depend to no small extent on his ability to put back upon the more or less skeleton notation such "flesh, blood and nerve fibre" as can best approximate for him the character of the original song and its singing. His ability to do this will be in direct ratio to the degree to which he is, or may become, familiar with the idiomatic variations of American folk singing."
—Ruth Crawford Seeger

The work, like the original, is difficult. Since it is six times as long, and covers an even wider register than the original, pianists have had to devise some unusual fingerings to perform it (such as not always keeping the hands in octaves). Although originally written for piano or "any ensemble"—the ensemble version has some added features—only the piano version has been played. Sarah Cahill, a specialist in RCS' work and in contemporary music of all kinds, has performed the piece more than any other pianist, and has recently recorded it. She often performs it on the same program with the *Piano Study in Mixed Accents* (which she has recently recorded for New Albion Records), and the juxtaposition of the two pieces in the same concert is intriguing.



Two pages from the score of *The Casten Variation* for solo piano (from the beginning and from the middle section).

A page from *Three Fiddle Tune Transcriptions ...*

THREE FIDDLE TUNES

The most recent piece I've made from Ruth Crawford Seeger's work is called *Three Fiddle Tune Transcriptions by Ruth Crawford Seeger* (January–February, 2001). Two of these are literal transcriptions for two electric guitars of RCS's own transcriptions of fiddle tunes for the book *Our Singing Country* (1941), while the third is, of necessity (as will be seen), more abstract. The three fiddle tunes are "Callahan," "Bonyparte's Retreat," and "Glory in the Meetin' House."

Again, confluence of activity created this piece. For the last few years, with the cooperation of the Ruth Crawford Seeger Estate and the help of Judith Tick, I've been working on an edition of *The Music of American Folk Song*, RCS's legendary, never-published monograph on American folk music and its transcription. This monograph was originally intended to accompany her 200 transcriptions for the 1941 *Our Singing Country* by the Lomaxes. One of the remarkable things about the Lomaxes' book (aside from RCS's excised monograph, which is one of the most brilliant things I've ever read on the topic of folk music) is that there are only two instrumentals transcribed: "Callahan" and "Bonyparte's Retreat"—both solo fiddle tunes (performed by Luther Strong, and W. H. Stepp, respectively). In researching and reconstructing RCS's manuscripts, I found some of the transcriptions she made which were not included in *Our Singing Country*. One of these was a fragment of a third fiddle tune called "Glory in the Meetin' House" (also performed by Strong). As a folk musician, I'm primarily a player (not a singer), so these three transcriptions held special interest. Also, spectacular recorded performances of each are available in some commercial form, though "Callahan," which is perhaps the most extraordinary, is hard to find. As I learned to play these tunes on mandolin and guitar, the tremendous virtuosity of both the players and the transcriber became apparent. It bears mentioning that one of Aaron Copland's most famous works is his almost verbatim scoring of RCS's transcription of "Bonyparte's Retreat"—but we heard not a word about RCS in last year's Copland centenary!

"An example of virtuosity in solo playing may be heard in *Callahan*, whose two simultaneous melodic lines are maintained by the one player at breakneck speed."
—Ruth Crawford Seeger

"Callahan," in particular, fascinated me. The tempo is inhuman, and it's essentially a piece for two fiddles played by one person. I don't know how Stepp did it. Fiddler friends who've heard this recording (and seen the uncannily accurate transcription) are usually mouth-droppingly awed. I believe it's simply a case of devolution: two highly trained electric guitar players of the twenty-first century can more or less play what one Kentucky fiddler from the 1930s could. I transcribed all three tunes for electric guitar duet (along with Carl Ruggles' *Angels*), for a series of concerts with Argentinean new-music guitarist Claudio Calmens last winter. But unlike my other work with RCS's compositions, the main point of this project was transcription itself, with the added aim of paying particular homage to her ultra-sophisticated and incisive thoughts on that activity. So, in two out of three of these pieces, I didn't change a note—they're just orchestrated carefully and, I hope, interestingly for two guitars. The third piece, "Glory ..." was never completed as a transcription, so I turned it into a kind of improvisation on the fragment. We haven't performed these pieces yet ("Callahan" is *still* too fast!), but they're fun to play. Having devoted so much energy to RCS's work in the past few years in my disguise as a musicologist, I needed to reappear as the composer I am.

"... one and the same notation can be given such diverse readings by brilliant virtuosi as to throw considerable doubt upon the original intent of the composer."—Ruth Crawford Seeger

MORE?

No, I don't think so. Though I still have a couple of ideas (7). I am considering taking her beautifully strange piano arrangement of "Sweet Betsy from Pike" and doing a solo guitar version exclusively using the guitar technique of tapping, as well as a solo guitar performance of *Piano Study ...* but who knows if I'll get to them. I'm still excited about advocating for RCS's work. To celebrate her centenary, this summer and fall, Mary Ann Haagen (one of the great experts and performers of Shaker music), Jody Diamond and I are performing *Let's Build a Railroad* a number of times (for kids, mostly).

"A great deal depends upon just how this bridge is built."
—Ruth Crawford Seeger

As a composer, though, I feel that this set of pieces is done, because—with respect to RCS's work—there aren't any new forms of arrangement that I want to explore. But, who knows? I may be surprised. Part of my feeling of closure has to do with RCS's rightful ascension to her proper place in our collective conception of twentieth-century music. In any case, happily, there's lots of other work to do, and it's time for me to move on.

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NOTES

1. Besides the many scores by RCS that are still either out of print, never in print, unavailable, or problematic in their current editions (*Preludes* for Piano, *Sonata for Violin and Piano*), there is a lot of her folk-song work still unknown, out of print (some of the short articles, *Let's Build a Railroad*), difficult to find (*Coal Dust on the Fiddle, Folklore Infantil de Santo Domingo*), and—in the case of the important *The Music of American Folk Song*—never published. A first edition of the latter, edited by myself and Judith Tick, is forthcoming at the end of this year from University of Rochester Press, and will include a number of her short writings on folk music as well. The publication of this work (from 1941!) will shed new light on RCS's musical ideas, with regard to both folk and art music.

2. *Lonesome Road (The Crawford Variations)*, New World Records, Martin Christ, piano, 80566–2, 2001.

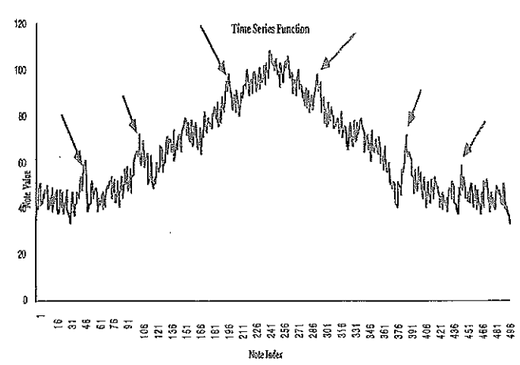
3. During the year in Indonesia, I wrote a number of other works, one a distinct contrast to *Lonesome Road*. *Bedhaya Sadra/Bedhaya Guthrie*, for choir, gamelan, and soloists is another "arrangement," this time composed by computer. Two songs are used, one by Woody Guthrie, "Rangers' Command," the other written at my request by I Wayan Sadra. The score and an article about it are in *Perspectives of New Music* (1996). Ironically, the composer, performer and frequent *Musicworks* contributor Daniel Goode made his *own* arrangement of this piece, for solo clarinet, which he performs often (a recording of this version will be on my next CD, *Change*, on Artifact Recordings). I like very much the way these ideas keep morphing.

4. My friend and frequent collaborator Nick Didkovsky has also done some remarkable work in this regard, specifically with his statistical analysis and reconstruction of Schubert. Klarenz Barlow has also been a pioneer of this aesthetic and computer technique.

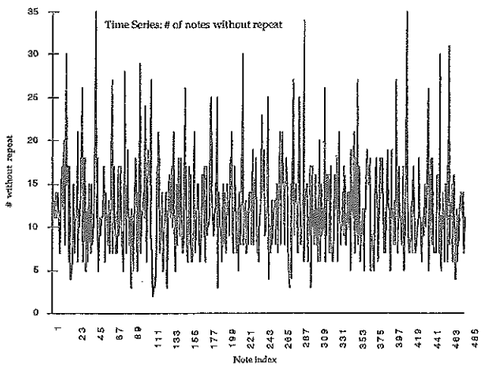
5. See Mark Nelson's pioneering article on this piece: "In Pursuit of Charles Seeger's Heterophonic Ideal: Three Palindromic Works by Ruth Crawford," in *Musical Quarterly*, 72(4), 1986. [A pioneering work on the *Piano Study ...* and Ruth Crawford Seeger's work in general.]

6. For a complete theoretical description of these metrics and more on the analysis of the *Piano Study ...* see my article: "Morphological Metrics," *Journal of Contemporary Music Research*, 25(4), 1996.

7. One other piece, the third of my *Essays for String Quartet* (1999), uses an RCS source: her piano arrangement from *Animal Folk Songs for Children* of "Don't Ya Hear the Lambs A-cryin'?" (a song that is almost the same as the famous "Blood-Strained Banders" from *Our Singing Country*). Additionally, the title of my five-movement work for piccolo or wind instrument, *Piker* (1998), is taken from a quote found in a letter to RCS.



Piano Study ... as time series (showing "periodicity ripples")



Piano Study ... Number of notes without repeating pitch class (Time series representation: whole piece)

REFERENCES

Books and Articles

Diamond, Jody. 1990. "There is no they there," in *Musicworks* 47.

Frog Peak Music, A Composers' Collective. 1986. *New Music for Plucked Strings*. Oakland, California. [This book contains much of the repertoire for this ensemble, which did a number of concerts in and around the Bay Area in the early 1980s.]

Gann, Kyle. 1997. *American Music in the Twentieth Century*. New York: Schirmer Books. [Gann's wonderful book contains a nice description of *Lonesome Road*.]

Polansky, Larry and Kennedy, John. 1996. "Total Eclipse: The Music of Johanna Magdalena Beyer," in *Musical Quarterly*, 80(4): 719–778, Winter. [10 editions of Beyer's music are also available from Frog Peak Music <www.frogpeak.org>.

Polansky, Larry. 1996. "Review of The Music of Ruth Crawford Seeger by Joseph Straus," in *American Music*, 14:3: 389–392, Fall.

Polansky, Larry. 1991. "Review of Ruth Crawford Seeger by Mathilda Gaume," in *Leonardo*, 24(3): 293–29.

Polansky, Larry. 1987. "The Music of Ruth Crawford Seeger" in concert program. Oakland, California: Mills College. Copy available on request from <www.frogpeak.org>. [This program contains a long biographical and musical essay about Ruth Crawford Seeger.]

Tick, Judith. 1997. *Ruth Crawford Seeger, A Composer's Search for American Music*. New York, Oxford: Oxford University Press. [Judith Tick's monumental biography is an authoritative and exhaustive source for all references, dates, chronologies, proper titles, and any additional information not contained here about RCS and her work.]

Edward, Tufte. *The Visual Display of Quantitative Information* (1983), *Envisioning Information* (1990), and *Visual Explorations* (1997). Cheshire, Connecticut: Graphics Press.

SONOGRAPHY

Seeger, Ruth Crawford and Beyer, Johanna. 2001. *9 Preludes*. Piano music of Beyer and Seeger played by Sarah Cahill. Liner notes by Larry Polansky. New Albion, CD 114.

Polansky, Larry. 2001. *Lonesome Road (The Crawford Variations)*. Martin Christ, piano. New World Records. 80566–2. [There are also two different suites from the piece, made by pianists Joseph Kubera and Michael Arnowitt. The Arnowitt suite is published by Frog Peak Music <www.frogpeak.org>.]

Polansky, Larry. Forthcoming. *Change*. Artifact CD. [This CD will contain a recording of *The Casten Variation*, Sarah Cahill, piano.]

WEB

Polansky, Larry. 2000. "Singing Together, Hacking Together, Plundering Together: Sonic Intellectual Property in Cybertimes," in *Open Space Web Journal*, <www.the-open-space.org/osonline/osonline.html>.

A page from *Sacco, Vanzetti*.

RÉSUMÉ FRANÇAIS

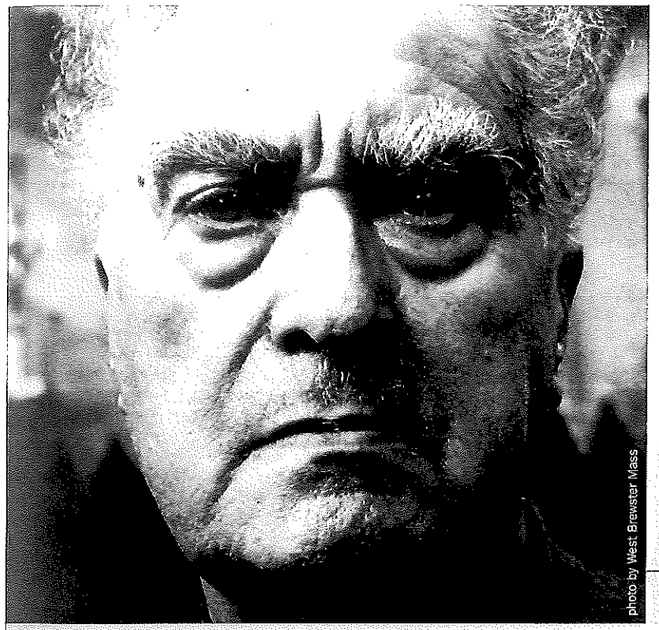
Larry Polansky a réalisé plusieurs compositions à partir de la musique de Ruth Crawford Seeger, tant des pièces inspirées de la musique de Seeger que des arrangements et des variations sur cette musique. Dans le titre *Comparrangetranscraboration*, Polansky lie composition, arrangement, transcription et collaboration en une seule activité créatrice. Seeger a été fortement influencée par la musique folklorique américaine et Polansky reprend cette tradition. Comme il l'écrit lui-même : « Les notions de "ma" et "pièce" sont mal comprises et sont en fait des artefacts de notre psyché collective. Des luttes de revendication pour la paternité artistique se déroulent en s'appuyant sur des arguments qui témoignent d'une profonde mécompréhension et sont des insultes à l'intelligence. Pour certains, l'art n'est pas un jardin culturel communautaire permanent mais davantage une ferme privée orientée vers le profit. Par la "création", nous faisons valoir des droits et nous en recueillons les profits, entrant ainsi dans les "arènes" historiques comme des gladiateurs prêts à mettre à mort ceux qui s'opposent à notre primauté artistique, sans égards aux coûts pour la raison et le bien-être collectif. »

MW CD 81

A LEGENDARY COMPOSER IN HIS DECLINING YEARS, WORKING AROUND HIS FAILING HEARING, HELPED AND WAS HELPED BY YOUNGER COLLEAGUES

Planes

A Reminiscence of Edgard Varèse in the 1960s



Edgard Varèse, 1965

Andrés Lewin-Richter and Alcides Lanza in conversation

Composers Andrés Lewin-Richter and Alcides Lanza first met in the mid-1960s at the Columbia-Princeton Electronic Music Centre (EMC) in New York City. There, first as students, then as assistants to the director, composer Vladimir Ussachevsky, they worked at the EMC in various capacities. Andrés Lewin-Richter also worked with Edgard Varèse in the creation of music for a film by Ian Hugo.

In 1968 Andrés Lewin-Richter moved to Spain, where he was the driving force behind the creation of the Phonos Electronic Music Studio in Barcelona. Today this is integrated into the Phonos Foundation, an institution of which Lewin-Richter is vice-president and executive director.

Alcides Lanza left New York in 1971 to teach electronic music at McGill University in Montreal, where he worked with instruments designed by Hugh Le Caine. He is the Director of the McGill Electronic Music Studio.

In the year 2000 the two composers met twice, in Barcelona and in Montreal, and interviewed one another about the experiences of their student years. Three articles resulted, each on an influential figure with whom they