



**Ellen Fullman**

**The Long String Instrument (LP)**

*Could you tell us in which conditions this record was realized (where & when)?*

The album was recorded in 1985 at Het Apollohuis in The Netherlands. This was the home of Paul and Helene Panhuysen, an industrial building in Eindhoven that they converted into living spaces, offices, and a gallery where installations and concerts took place. They produced a festival there: Echo, The Images of Sound, and produced a series of LPs on Apollo Records. I recorded and performed the tracks for the album myself in a loft space in the building. Paul and Helene hosted touring artists there as an informal residency program, and they allowed me to stay while recording my album. I was 28 years old, had moved to Williamsburg Brooklyn in 1981 when I was 24, and had begun researching and developing what has become The Long String Instrument, catch as catch can, on rooftops and through gigging. I had no permanent workspace and supported myself through waitressing and various odd-jobs. During the Reagan presidency in the 1980s, funding for the arts was drastically cut, there was a recession in 1981 and another financial crisis peaked by 1986. The invitation to perform in Europe and record an LP was an unimaginable fulfillment of my dreams come true. It opened my eyes to the possibility of normalcy in living and working as an artist. Although I returned to America to many years of supporting myself with day jobs, I retained a glimmer of hope from that experience.

*What pushed you at this time to make this recording?*

I was so excited to share this new sound that I had discovered. These were my first explorations of just intonation, or natural tuning, and of designing a performance and compositional approach with this new instrument.

*How much of the music in this record is improvised or composed?*

All is composed. Pauline Oliveros introduced me to improvisation in her piece, Epigraphs in the Time of A.I.D.S. in 1993.

*Was improvisation a process of composition? or did you have clear ideas from the beginning?*

Improvisation is the process I use in composing. I plan structural ideas, harmonic ideas and develop these through playing. The harmonics that my instrument produces are a major source of compositional ideas and I discover these through playing even one chord for long durations and listening carefully. Currently I am using recording as a tool for composing and for listening more carefully to notate the changing partials that emerge.

*How different is this recording from the live experience? Would you say this recording is representing the live experience? or did you think and plan this recording as a sonic object in itself which would not necessarily relate to the live experience?*

My intention on most records has been to represent the live experience. I have only once made a multi tracked piece to be experienced as a recording and that was Staggered Stasis. I have been disappointed in recordings of my instrument since I began working with it but that hasn't dissuaded me from trying. Finally, with my partner Theresa Wong's help, I have found a beautiful and more representational recording technique. In 2020 we conducted a detailed study on microphone placement. We decided on a configuration using close micing on each resonator with ribbons and an omni spaced pair in the room. The omni microphones really capture the spatialization, movement of waves in the room. The ribbons are so flattering, like little accordions themselves, reeds buzzing. They don't reproduce every frequency, only the ones you *want* to hear. There is a real tactile quality to the sound of ribbon mics. I feel most proud of the sound that we have captured because with it for the first time ever, I feel no need to add reverb or EQ, the only processing I am doing is a rumble cut.

*I have heard and seen you performing live in Brooklyn, NY, at the Issue Project Room where I have heard and seen a lot of other things. I was very impressed by your relation to space and how your body is involved in the production of sound but also in how you designed the space. How do you feel about a recording which can probably not reproduce that space experience (even if it leaves a trace somehow)? How much of this relation to space is important in your music production? What would you focus on when you record, then?*

The sound at Issue was one of my favorites, with the reflective black marble clad walls. I also value irony and thought of it as a visual joke that my instrument extended through a doorway. I think those that experience my installation live have a more impactful impression of my work and the tactile nature of performance on my instrument. I consider the location of the resonators, where the acoustic sound is generated, to optimize for resonance and then try to optimize the visual impact in relationship to the architecture and the audience placement. Without lighting of the strings my installation is practically invisible, so that is very important to me, the horizontal streak of fine metallic lines. Somehow this reads for me as the surface of a river moving past that I am walking through. I feel that I want to share my work as widely as possible and recordings and films can touch a much larger audience than could ever come to my live performances, therefore I aim for the highest quality in production that I can achieve. Currently I am working on a major piece for *The Living Earth Show*<sup>1</sup> to play my instrument with me that will be videotaped by *This Land Films*<sup>2</sup> at the *Headlands Center for the Arts*<sup>3</sup> in March 2022. My intention is to document the performance techniques for archival purposes but also to try to convey what it is like to be there.

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<sup>1</sup> <https://www.thelivingearthshow.com/>

<sup>2</sup> <https://etfilmhome.com/>

<sup>3</sup> <http://www.headlands.org/>

*How did you get to create such an instrument as the Long String Instrument? How did you process the learning and the development of the LSI?*

It has been bit by bit, for four decades now. So many facets, so many people involved, music theorists, composers, engineers, books, master carpenters and musical instrument builders and sitting with my notebook and pencil dreaming it up. The original inspiration was Harry Partch. I was studying sculpture and I felt a kinship with how visually artful his instruments are, and the utter creativity and originality of producing an ensemble of instruments and composing for them. Just a photo alone set me on fire, and not so much the music at first. I didn't know anything and still I had the feeling, I can do this, and I really want to. I began experimenting with the resonance of materials.



(Halle Festspiele, Hamburg, photo: Daniel Wolcke)

*Do you sometimes feel limited by your instrument?*

Yes! These times have always led to a breakthrough where I discover a new sound. For example, I became tired of the drone. This led me to develop the box bow tool, and now a larger version called the shoveler. It was not until two years ago that I finally felt pleased with the timbre of the instrument and no longer feel compelled to improve it technically. Now I can expand to include writing for other instruments to play with my instrument. I am planning a piece to perform with *JACK Quartet*<sup>4</sup> and hope to tour it in Europe in 2023.

*Getting back to the recording, you're using an instrument called the water drip drum. Could you explain to us the way it works? Why did you decide to leave it?*

The water drip drum utilized multiple fish tank valves to regulate water dripping at different rates into a cooking pot. As the water filled in the pot, pitch and timbre of the dripping changed. I set up a spring-loaded circular disc pedal that tilted the pot at any angle where pressure was applied to the pedal. The idea for this came from exploring sounds while

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<sup>4</sup> <https://jackquartet.com/>

washing dishes. I processed the dripping sound through guitar pedals and used a digital delay to tune the frequency of the drip precisely to my instrument. This instrument could be performed, or left to run on it's own. I abandoned it, much like the Metal Skirt, because it was limited in what it could do and I wasn't interested in simply repeating myself. Also, the beat was not precisely controllable so that limited its use.

*I've read that you were influenced by music concrète. Could you tell us how, who? What actually interested you in this musical movement? was it only esthetic or also "politically"?*

You might be thinking of music concrète as a specific style of music founded by Pierre Schaeffer. For me as a naive artist in my 20s in the American Midwest it simply meant a process of making music with objects that are not traditional instruments and using studio tape recording techniques such as playing back at different speeds, tape loops, etc. It was all about looking for resonances with materials, experimentation. My work was political only in that I followed my own instincts independently without any established context or financial support. What interested me in working this way was that it was accessible to me to do with no musical training, and I was searching for new sounds.

*You wrote (in Spectres II, Resonances<sup>5</sup>): "When I keep my instrument carefully in tune, my work moves forward into uncharted territory". What is your relation to control? Do you have these moments where you would feel like something stronger is taking care of the music? Are you confronting unpredictability in your performances? if so, what would be the form of these unpredictabilities? What is your vision and opinion on the practice of improvisation (as a form which uses the concept of unpredictability somehow)?*

The careful tuning quote refers to my study of North Indian music. In my study of North Indian music, I learned that rag scales and compositions might be thousands of years old, passed down through the oral tradition. In learning this music I felt in awe of the generations of people who participated and contributed to this tradition, and the sensation that music moves through us, that we as musicians are transmitters of something larger than ourselves. In natural tuning, when intervals are aligned periodically, harmonics are also in tune and amplified louder due to sympathetic resonance. This allows me to hear tonalities in the partials that suggest directions in my composition. It usually takes about thirty minutes or so to have a deep enough level of concentration to hear in this way, or to even be able to play in a way that produces this effect. In my music I am not so much interested in confronting unpredictability, as far as improvisation goes, as in focusing more deeply on subtlety and nuance of gesture in the moment. I don't think The Long String Instrument is a good vehicle for free improvisation. The things that it does well don't fit into an aesthetic of sudden changes.

*About Pauline Oliveros, in which context and how did you meet her? What did she bring to you?*

I first met Pauline at the New Music America festival in 1980 when I was 23 years old at the Walker Art Center in Minneapolis where I performed with my Metal Skirt. A few months later she gave a presentation at the Walker Art Center in a series called Meeting with the Moderns. She was very personable. I saw her in the museum bookstore and she laughed and told me she hadn't recognized me because I wasn't wearing my Metal Skirt. Pauline was very

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<sup>5</sup> <https://shelter-press.com/spectres-2/>

approachable, available. When I moved to New York soon after, I was able to see Pauline regularly as she was living in Tribeca, and then when I moved to Texas she was also around frequently because she grew up in Houston. Pauline was very encouraging in my early years when everything seemed impossible. In 1993 she invited me to collaborate on our Suspended Music project and this was a major turning point for me. It was my first large commission and major production. Pauline was a futurist and pushed others around her into new technologies. I opened my first email account in 1992 in order to communicate on our project and that was truly exciting. She held online classes at Mills College nearly 20 years before it became the norm in the covid era.

*I was quite fascinated by your work The Metal Skirt<sup>6</sup>! How did you get the idea for this performance? What I found interesting, besides its sound and artistic aspect, was its social side. You go out in the street to perform, you dive into the world of "unprepared" people... how was it for you to confront this artistic performance with a form of everyday reality?*

The idea for the Metal Skirt Sound Sculpture came from photos I saw in art school of Hugo Ball's Dada performance costumes. I was studying the human form intensely in drawing and sculpture. I was very excited by contemporary performance art, Laurie Anderson in particular, and in exploring fabrication with a variety of materials. This was my most successful early piece to combine sound, performance and form. I placed myself into the everyday world and created an absurd spectacle. Absurdity is an important component in my work and I feel The Long String Instrument shares this same effect, the ridiculous large scale, and very surprising sound. The sounds the skirt made were a direct result of my walking. For me as a performer I gained confidence from the fact that all I had to do was walk. The performance looked bold and exposed, but I was protected by my crew, friends trailed along behind me off-camera. I walked in what was the area of town where prostitutes worked, and I called my performance Streetwalker, a slang term for prostitute. I thought that was funny because in my performance I was literally walking on the street. I didn't think about deeper considerations about the reality of prostitution but I was attracted to perform in that gritty urban area where I felt I would get attention that would play well for the video, and at the same time be just one more element in the mix of humanity. In performing I felt I operated in a magical extraordinary realm. I hadn't planned what to do in the case of public interaction and really didn't want to break the fourth wall, I simply wanted to keep walking forward. When I was spoken to, I tried to ignore it until when asked, "Where are you from?", I summoned the wit to respond, "Planet Earth", which elicited laughs and allowed me to go forward alone.

*You say this is an absurd spectacle but would you also say this performance has something political? Wouldn't the desire to reach absurdity be a kind of political statement? Would this performance have a relation to feminism?*

My attraction to Hugo Ball's work was at the time based solely on the visual aspect but I can say now that I am fully in alignment with the Dadaists in being anti-nationalist and anti-war and I shared these views then, only I wasn't conscious of the connection. I always felt vulnerable when wearing a skirt, and this performance in a skirt that looked like armor was my way of rebelling from the traditional feminine role. I was playing with the idea that skirts attract the male gaze, and at the same time counteracting/attracting that attention with the absurdity of the sound and the metal. My work also relates to feminism in that where I grew

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<sup>6</sup> <https://www.youtube.com/watch?v=CRRRJ9fqg4Q>

up, in the Deep South, girls weren't supposed to build things or handle tools. I never felt inhibited about that personally though, because of the influence of my father. He dreamed things up and then built them, not wondering whether he was qualified or not.



(photo by Ann Marsden)



(still from footage shot by Robert Doyle)

*To get back to the Long String Instrument, you've developed a specific language, around just intonation. Could you tell us more about it? What different possibilities does it offer compared to tempered intonation?*

For one thing, with just intonation one can make up new chords, harmonies, not following the rules of music theory. I like hearing unusual harmony, I like inventing it. The most interesting thing about just intonation is to consider the harmony possible in partials combining into new harmonies. In my work there exists the potential for what I call, bloom, or resonance, when the sound becomes sweeter, smoother and feels in my fingertips as if sound is a physical object that I am able to mold.

*Are you developing other tools, such as the box bow?*

I have always been attracted to rhythm. It took many years to develop a way to play rhythmically on The Long String Instrument that was interesting enough to compose for. I first developed the box bow, a small hand held hollow wooden box with a curved rosin coated surface that interfaces with the strings. This curve is based on the curvature of the palm of the hand, and strikes the strings based on hand drumming techniques. I designed the box bow because the bare hand sound was lacking in clarity. I have expanded this concept in the shoveler which plays nine strings at once.



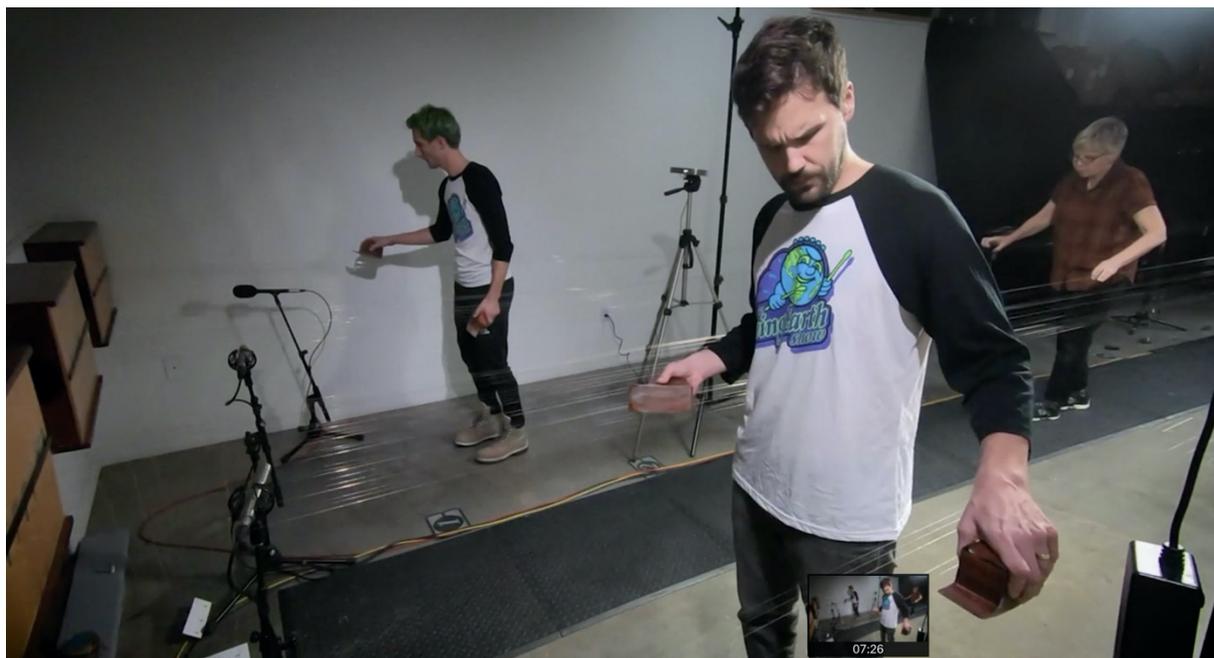
(shovelers-- Ellen Fullman)

*Are you thinking of transmission? Would you consider transmitting the practice of the LSI to other people?*

From the beginning I have thought of transmission, because I have always thought of my instrument as an addition to the lexicon of established musical instruments and envision use of it extending beyond my lifetime. In the mid 1980s I composed and performed duo and quartet pieces for my instrument. It became more practical for me to perform solo on it for financial reasons; I wasn't able to find gigs with large enough budgets to bring additional performers. I had an apprentice for a few years but he is no longer actively working with the project. Procuring an enormous space is a major roadblock; I wasn't able to manage that myself for several years along the way. For the video performance of my trio with The Living Earth Show playing box bow that will take place in March 2022, I have requested from the filmmakers that performance details are documented well. I would like this film to exist as an archival document that can be studied in the future. On the other hand, I am so particular about tone and involved with self-development that I have neglected outreach to students. I feel that producing good bowing technique is very difficult on this instrument, takes a lot of practice, and no one else has ever really put in the time required.

*What is a recording and the act of recording for you? an archive? an artistic object in itself? a bit of both?*

Recording is all of these. I learn so much from recording -- When I listen back to recordings I can hear what a gesture actually sounds like, uncolored by what it felt like to do it. In this way I am able to alter my performance toward how I want it to sound. I use recordings in composing, I edit and retune recordings, multitracking ensemble pieces. Playing back a recording I can measure partials that emerge, and when, or rather where along the string length, a partial sounds. In composing parts for other instruments to play with mine, I create scales and harmony with these mapped partials.



(Andy Meyerson, Travis Andrews and Ellen Fullman, still from footage by Roger Jones)

More about Ellen Fullman

<https://www.ellenfullman.com/>

This written interview between Ellen Fullman and Frantz Loriot took place between October and November 2021.