

UNIVERSITY OF CALIFORNIA SAN DIEGO

Metatrobe

A dissertation submitted in partial satisfaction of the
requirements for the degree Doctor of Musical Arts

in

Contemporary Music Performance

by

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Chair

University of California San Diego

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To Marie, thanks for everything.

VITA

- 2011 Bachelor of Music, Florida Atlantic University
- 2013 Master of Music, Florida International University
- 2018 Doctor of Musical Arts, University of California, San Diego

ABSTRACT OF THE DISSERTATION

Metatrobe

by

Kyle Richard Motl

Doctor of Musical Arts in Contemporary Music Performance

University of California San Diego, 2018

Professor Mark Dresser, Chair

This document reflects on the development, performance, and reception of my music for solo contrabass. Issues of notation, composition, embodiment, and chaos are explored in respect to a musical practice rooted in improvisation. Technical and musical issues specific to the contrabass and this solo work are addressed, as are the relationships between two live performances and a prior recording.

INTRODUCTION - DEVELOPMENT

In recent years, solo performance has become a central part of my musical practice. The double bass is a great vehicle for solo performance; with its wild noisemaking possibilities alongside the capability to produce a rich and pure sound, and its ability to clearly articulate melodic and harmonic content. Further, there are many subtle sounds the bass is capable of producing that are frequently all but lost (or at least difficult to convey or amplify) in ensemble situations. This alone is reason enough to pursue solo performance on the contrabass. The context in which this practice developed is also important in understanding the process. A number of factors have pushed me in the direction of pursuing solo music over other endeavors including my interest in the sonic capabilities of the contrabass and the pragmatic fact that it is the most sustainable and portable (in the sense that I do not need other people to learn music and I don't need to arrange travel or accommodation for anyone but myself) of my artistic projects.

Solo performance provides a situation where I can explore many of the finer details of the contrabass on their own terms; things that may not be perceivable (or may be confused) with percussion and other instruments. Though the bass is generally considered a monophonic instrument, an ongoing interest has been achieving a form of solo polyphony, whether through layering of timbral material or counterpoint in the traditional sense.¹ The instrument works

¹ There is a tradition in solo improvisation of developing forms (or the illusion) of polyphony on instruments not considered polyphonic. Evan Parker: utilizing circular breathing, all manner of multiphonics, and polyrhythmic cross fingerings; Mark Dresser, investigating bi-tones and timbral explorations of the instrument, Barry Guy through sheer density and rapid juxtaposition of materials, Roscoe Mitchell through his approach to melody and multiphonics. These are an influential few, among many.

very well for generating complex timbres and “noisy” sounds, and through combination of materials, dense amounts of activity are generated with ease. In my solo work, I am interested in controlling and manipulating these unstable sonorities and shaping fields of density.

Reflecting on the development of this music, I examine issues of improvisation, composition, notation, embodiment, entanglements, chaos, and the physical qualities of sound. After a brief personal history, I will present some thoughts on recursion and entanglement, as well as how these concepts are at play in music. Finally, I will analyze some example works, compare two concert-length performances, and reflect upon recent performances on tour.

A Brief Personal History

Some kind of overview of my musical development as a bass player is useful in looking at this process. I make no attempt to include every influence or event, but hope to shed light on what seem, in retrospect, to be significant points along the way. I didn't pick up music until high school; inspired by some death metal and progressive metal bands, I decided to learn to play the electric bass during my freshman year. By my junior year, I was listening to (and learning to play) jazz, and like many musicians of my generation, my introduction to jazz was primarily through fusion: Mahavishnu, Chick Corea, Weather Report, late Miles Davis. Outside of the school big band, there was no opportunity to play jazz in my hometown in rural Florida.

When I began my undergraduate degree in jazz performance at Florida Atlantic University, I only played electric bass. However, the orchestra needed bass players, and I was offered additional classical lessons as well as a bass to borrow if I joined. At some point, I realized that were I to take either instrument truly seriously, I had to make a choice between them, and the double bass won. Three of the bass players that cemented this for me were Jimmy Garrison, Avishai Cohen, and Mark Dresser. It was shortly after the release of Avishai's trio record, *Gently Disturbed*; the propulsion of Avishai's grooves and the rhythmic dynamic of the trio had me hooked. I forget which Mark Dresser record I heard first, (I discovered him through John Zorn; I believe the first record I heard may have been *Marinade*), and I read his article in *Arcana* shortly after, which opened a whole world of sonic possibilities I was previously unaware of. At this time, Ornette Coleman, John Zorn, Gyorgy Ligeti, and Bela Bartók among others were significant influences.

Through my undergrad, I transcribed music by John Zorn, Vijay Iyer, Avishai Cohen, Dave Holland, and other "contemporary jazz" composers. I was always intrigued by the later period of John Coltrane, but really began to delve into the records such as *Meditations*, *Sun Ship*, *Ascension* towards the end of my undergraduate career. At the same time, I was trying to find music by Stefano Scodanibbio, who I had discovered via Mark Dresser, and in turn learned of the composer Luciano Berio (and the *Sequenza XIVb* that Scodanibbio reimagined), and of the bassist/composer Håkon Thelin. An interest in odd meters and rhythm led me to begin investigations into Carnatic and Balkan music and rhythmic practices.

Not long before I started my master's studies, I began playing with the drummer Abbey Rader, which would alter my course forever. I remember the first thing he told me was that he hated playing with bass players (it turns out because most bass players couldn't understand his form of circular post-Coltrane pulse; he felt weighed down). Abbey is now my longest and most consistent musical collaborator.² I more thoroughly investigated the free jazz tradition, now having a real experience and window into it, particularly delving deeper into the later period of Coltrane's music, as well as Cecil Taylor, Dewey Redman, Sirone, members of the AACM (particularly Anthony Braxton and Leo Smith).

Though studying jazz performance in school, I had more in common with the technologists and composers at Florida International University. The jazz students had no awareness of the music I was involved in, and the faculty (while acknowledging the problems with jazz pedagogy) did nothing to support it. I began to work with live and interactive electronics, coding music tools in Max/MSP software. I collaborated with computer musicians and composers, and performed in the school's new music and laptop ensembles. I developed a deep interest in spectral music, particularly the composers Iancu Dumitrescu, Ana-Maria Avram, Horatiu Radulescu, and Kaija Saariaho, as well as Steve Lehman (who took ideas more from the French side of spectral music and merged it with jazz). In spectral music, I saw a direct and rather deep use of the raw, distorted, noisy, but also the pure and crystalline sound that the contrabass is capable of producing. Hearing Iancu Dumitrescu's *Medium III*, performed by Fernando Grillo, was a turning point for me. The use of multiphonics and

² As of writing this, Abbey and I have five records together, with two more recorded and on the way to publishing. The way we interact as a rhythm section allows for a large flexibility in time, while maintaining a powerful pulse that allows horn players to float over it.

distorted sounds (all made acoustically with the bass) were unlike any I had heard from the instrument before. I began studying contemporary solo repertoire for bass, including works by Luciano Berio, Kaija Saariaho, Gyorgy Kurtag, and Stefano Scodanibbio.

The first unaccompanied solo bass concert I played was on a noise music series curated by Kenny Millions (formerly known as Keshavan Maslak) in 2013. I don't think playing an improvised solo bass set was something I had really considered at that point, but I started developing material from then onward. The free jazz and contemporary music practices, which I saw as porous anyways, began to come together. Reflecting on it, I was much more aware of composed music for the bass and contemporary classical soloists than I was of solo improvising bassists at the time. I had certainly heard Joelle Leandre, William Parker, Barre Phillips, and others prior, but hadn't investigated the music as thoroughly as I was about to. Around this time, my horizons were broadening rapidly, and I was exploring European variants of free improvisation, as well as noise music. It was around the fall of 2013 when I discovered Barry Guy's solo playing, which became another turning point in my conception of what the bass could do in terms of sheer velocity, density, and juxtaposition of ideas, while utilizing a wide timbral palette.

At UC San Diego, I began to focus on solo music even more, both composed and improvised. While I've had the opportunity to collaborate with many wonderful improvisers³ and composers, UCSD has really offered me a peculiar situation to work on playing music by

³ A sincere debt of gratitude to everyone, including but not limited to: Kjell Nordeson, Tobin Chodos, Josh Charney, Drew Ceccato, Tommy Babin, Adam Tinkle, and Putu Hiranmayena.

myself. Developing my own solo music was something that I always worked on in parallel to the other solo music I played and my ensemble projects and composing.⁴

2013 through 2015 saw a gradual development of my solo music, including a number of performances at the Carlsbad Music Festival (2014-2016), various series at the Audiotheque on Miami Beach, the Intuitive Music Conference/Festival in Lubiaz, Poland, a handful of performances at UC San Diego. Of course, in this time, I became much more invested in solo bass music specifically, and the assorted approaches to improvised music. In 2016 this solo work became even more of a priority and saw further development, with performances at UC San Diego the International Society for Improvised Music Conference/Festival at Wilfrid Laurier University, Scholes Street Studio in NYC, the Festival Internacional de Musica Experimental in São Paulo. From 2014 through 2016, I spent time documenting and developing aspects of my solo practice towards the goal of releasing a solo recording.

In December 2016, I set aside time specifically to develop some of the solo concepts I worked on over the years, culminating in two days where I had studio space reserved and could record at my leisure. At the end, I whittled the material from those two days down to approximately 50 minutes for the record, *Transmogrification*. The title references the element of transformation of material, sometimes humorous, bizarre, or magical, that became important to me in the development of the work. Live, this transformation extends to the transitions between materials and sections.

⁴ In my time at UCSD I presented solo music by composers including (but not limited to): Barry Guy, Tobin Chodos, Stefano Scodanibbio, Håkon Thelin, Anthony Braxton, Ana-Maria Avram, Caroline Louise Miller, Hans Werner Henze, Gyorgy Kurtag, Iancu Dumitrescu, Horatiu Radulescu, and others.

After recording what would become *Transmogrification*, I prepared for my third DMA recital (titled *Metatropé*) which would be a nonstop, concert length (in this case, an hour) solo performance developed from the recorded material. The concert form ended up informing the track order of the recorded release, to some degree. The progress of events on the recording creates an arc somewhat similar to some of the subsequent live performances, but with more delineated/discrete sections. Since then, I have more actively presented this solo music: on a number of tours throughout the United States, in Mexico, and in a number of festivals. I continue to develop this music further: compositionally, improvisationally, and technically, documenting it in recording and presenting it in concert.

On Recording

Transmogrification was recorded using four microphones: a pair of DPA 4006 omnidirectional microphones around a Schneider disk (foam disk emulating a head) about 3-4 feet away from the instrument, a Neumann TLM 103 about a foot away from the instrument and about six inches higher than the bridge, and a Schoeps MK-4 also about a foot away from the instrument, pointed at the neck where it joins the body. A pretty standard recording setup: the omnis panned hard left and right, and the other mics in the center. In the recording process, on a whim, I panned the two microphones, placed vertically on the bass, apart in the stereo field. Ordinarily, these microphones would both be panned center, and are used to capture different components of a unified sound. Panning these microphones apart created a much more vivid stereo field to the recording, which is particularly noticeable in headphones.

In situations where the point of activation along the string changes, a much more orchestral texture is achieved, a multidimensional sound. This can be heard on *Phosphene*, *Dnomla*, *Thwombulus*, and other tracks. This method creates a sound field potentially more vivid than that of a live performance, unless one's head was sideways, immediately before the bass.

On Concert Length Performance

It is worth noting that in live performance, I frequently play the entire duration of the set without stopping. On *Transmogrification*, I recorded shorter improvisations and character pieces, exploring various themes, techniques, and materials. Live performance lends itself to the extended improvisation, while recording alone in a studio doesn't offer the same kind of audience energy. Recording presents the opportunity to document specific materials with clarity, and to present them on their own. In our busy culture, inundated with media, it is hard for many to sit down and find the time to pay attention to a concert length work. Frequently, people are listening in a situation where they haven't necessarily entered into a space particularly for the reception of music (which one could at least partially assume of those attending a concert). Breaking the music up into smaller portions made sense from a consumption point of view as well as the practical side of documenting ideas.

I am not the only person to operate this way; Peter Kowald's *Was da Ist* consists of 23 short improvisations, while in live performance, he tended towards set length improvisations which were generally constructed from the distilled materials on *Was Da Ist*. On *Transmogrification*, five of the fifteen works were more or less composed beforehand:

Panjandrums!, *ax[i]on*, *Scintillionic*, *Transmogrificant I*, and *Phosphene alpha*. The other (more thoroughly improvised) pieces explored various techniques, textures, and trajectories. In live performance, these areas are landing points of some sort, and I navigate my way between them, transforming them and improvising the space between.

In a continuous performance, the transitory space between materials provides more opportunities for unknown or new musical developments via improvisation. This might be the place where the most “new” content appears in a performance. Relatively fixed ideas give way to the possibility of the unknown, in the space between known territories. Lê Quan Ninh echoes this sentiment when he says “When I play solo... I need some form of ritual, a ritual in my state of solitude. I have to repeat the things that have been inscribed in me, little by little, all these years in the making... I call these repetitions my *compulsory figures*, motifs that have emerged and that I have memorized.”⁵ Ninh, the consummate improviser, acknowledges the significant practice work and development of materials and their appearance in his solo improvisation. However, what is most important to him, is actually the space between these materials: “whats important are the transitions between them, the interstices of my habits and patterns where the heart of improvisation lives. I lean toward getting rid of these compulsory figures, so that only the transitory phases would remain.”⁶ While I agree that the transitory areas are *more improvised* in some sense, I remain too connected to my compositional aims and the material I’ve spent so much time working on to abandon them.

⁵ Lê Quan Ninh, *Improvising Freely: the ABCs of an Experience*, (Guelph: PS Guelph, 2014), 73.

⁶ Ibid.

There are dangers to the concert-length mode of performance. It can be taxing on the audience, and it is easy to get into a mode of continual performance that leaves little space for ideas to resolve. Individual ideas may not develop as fully formed as they may when presented on their own. There is also no space to stop and “reset.” However, there is a journey that is undertaken in the concert-length improvisation that isn’t palpable with the presentation of individual works. There is a transformative aspect to long duration performances, both for performer and audience. Also apparent is the physical reality of the performer starting, and not stopping until an entire concert has passed; an act of endurance.

Issues of Notation

I have hesitated to codify much of my solo music in terms of notation and fixed quantities. Or to call it “finished.” In small part due to the unstable phenomena that many of the materials rely upon, but primarily that I see it as a work continually developing and in progress. With regards to notation, I’d rather not feel confined to do something a particular way, should I have the urge to take things in another direction, or if unstable phenomena (music materials or audience energy) intervene. I’m constantly working on developing the technical and musical ideas I engage with further. Some of these things evade the structural codification many traditional scores impart. In this way, it makes sense to see the practice/process as musical work: a constant one that is always composing itself. Cecil Taylor stated that “Notation can be used as a point of reference, but the notation does not indicate music. It

indicates a direction.”⁷ For the performer/composer/improviser, this attitude makes sense to me: the score as presentation of materials for elaboration.

Further, this music is very much an embodied work, and a result of physical process and how I personally deal with my instrument. Traditional Western notation serves to separate the body from the music/spirit, and isn’t wholly sufficient for describing the physical realities of the performance situation.⁸ Recent scholarship has begun to erode the cartesian split, particularly in the realm of improvised musics, including David Borgo’s case study of embodied mind in the solo performance of Evan Parker and Vijay Iyer’s research on embodied cognition in West African and African American music. A new approach to representation may be necessary to describe such music.

The standard notation system is good at quantizing things in the domains of pitch and time. For music played on and grid of pitch and rhythm (with some concept of unison or a unified idea of pitch and time), it allows for the efficient transfer of information. For example, see the score to *Nothing but Panjandrums* in the appendix: it is much easier to learn this from the page than by ear or to teach it orally. As regards my solo practice then, notation has been useful mostly for the thing its good at representing: pitch relationships (and pitch material to be developed) and rhythmic relationships (also to be developed). The initial pitch material of the solo piece *Transmogrificant I* existed on paper before I first performed it, though I had a

⁷ Kaja Draksler, “Cecil Taylor: *Life As...* Structure within a free improvisation,” (Conservatorium van Amsterdam, 2013), 40.

⁸ See Tim Hodgkinson’s work detangling the relationship between religion, pedagogy, and Western notation in *Music and the Myth of Wholeness*.

very particular sound concept in mind beforehand. It presents a limited pitch structure to be articulated in a prescribed way, and then offers the freedom to develop.

Recently, I have been interested in literature that subverts traditional narrative forms, frequently with sudden but barely perceptible shifts in location, tense, and/or perspective. Primary examples of these being the Chinese author Can Xue and Korean authors Bae Suah and Jung Young Moon. How to achieve this musically? Music is perceived in time, and relies on memory, so we almost automatically perceive a chain of events as a narrative. Three methods may achieve this would be use extremely dense chaotic material (where it wouldn't be possible to have much memory), one long line that developed in such a way as to be prohibitive of memory (as an example, Anthony Braxton's Ghost Trance Music), or genre/style shifting jump cuts a la John Zorn and Naked City. The most perceptible of these in terms of shifting timelines or tenses would be the polystylistic jump cuts. Much of Anthony Braxton's music calls the musical timeline into question, through the use of multiple works simultaneously in performance (and even the use of older recordings in the performance of newer works). I am not sure that this is a line of inquiry that would work as well in music as in literature. Given the relation of musical form to narrative structure, the closest option may be to subvert standard and classical forms (sonata, rondo, AABA song form, etc), which improvisation already does.

In terms of scores, most are perceived as linear and thereby somewhat narrative in form. It occurs to me that graphic scores may present a visually non-linear and non-narrative form, which could still be perceived by the listener as both linear and narrative. *Jade*

Mountain Soundings by Malcolm Goldstein presents a situation with no beginning and no end, where a limited gamut of pitch is explored along a continuum of timbre and dynamic (bow location and pressure determined by the size and direction of lines). Because of the limited material, formal development is not apparent. Barry Guy's graphic scores manage to present large amounts of contrasting material with some formal constraints but the potential to go along any number of tangents. Guy manages to be specific about the core content/material of the work, but allows space for the development of these materials; in a way, the score is like a map.

Bodies and Inner Phenomena

Improvised music and traditional musics the world over have close relationships with the bodies involved in their creation, but also consider the inner nature of sonic phenomena. Improvisers hone and develop personal idiosyncrasies that result from their physical interaction with the instrument. Cecil Taylor mentions that "these people who choose to improvise utilize certain physical things in their characteristics and transpose them to the instruments and, after a certain amount of years, these things take shape in a form..."⁹ So called extended techniques become common place, and are in fact, only really extended in relation to European art music; many traditions embraced these techniques long before the west reclaimed them. Le Quan Ninh touches on the relationship between instrument, body, and music while pondering the traumatic effect that traditional (Western) pedagogy has had by ignoring the body. He notes that the extreme specialization and separation of ear and body

⁹ Matt Weston, "Cecil Taylor Panel Discussion," <http://www.mattweston.com/cecilpanel.html>, accessed April 13, 2018.

has allowed “a certain efficiency of musical development and interpretation of a certain repertoire, but it completely inadequate to capture and understand sound as a whole”¹⁰ Ninh realizes that mind and body aren’t separable, and that in a successful improvisation, one can “live fully right within a double negation: neither strictly body or mind.”¹¹

It seems that those musicians and traditions more in touch with this connection of mind and body (and the relationship to the instrument) in music tend to be more aware of (or concerned with) inner phenomena and embracing the physical proclivities of instruments. Ninh suggests that one should guard oneself against being expressive and to not allow one’s gestures to default to the expressiveness of a self unaware of itself.¹² In Tuvan art, artistic skill lies in revealing the inner nature of materials whether in music or carving.¹³ The Tuvan musical practice is inward looking, revealing the latent potentials of the sound (harmonics of a fundamental) while truly manipulating the physical medium to activate it (throat singing). Many musicians utilizing complex spectra in the West touch on this idea of revealing the inner or hidden nature of things. The Romanian spectralists talk about it. Mark Dresser titled one of his solo records *Unveil*, clearly a reference to revealing the (hidden) potentials of the contrabass. Of John Coltrane, Cecil Taylor said “You can’t separate the means that a man uses to say something from what he ultimately says. Technique is not separated from its content in

¹⁰ Lê Quan Ninh, *Improvising Freely: the ABCs of an Experience*, (Guelph: PS Guelph, 2014), 24-25.

¹¹ Ibid, 26.

¹² Ibid, 40.

¹³ Tim Hodgkinson, “Musicians, Carvers, Shamans,” (*Cambridge Anthropology*, vol 25, no 3, 2005/6), 7.

a great artist.”¹⁴ Technique, the body, and the music are all inseparable in the practice of creative and improvised music.

¹⁴ Cecil Taylor, “John Coltrane: *Soultrane*,” in *The Jazz Review*, vol. 2, no. 1, 1959, 34.

MUSICAL WORKS AND ANALYSIS

Though the following descriptions of pieces tend to focus on technical issues, my music is not centered around techniques. Rather, the music is about transformation, development, and energy; each timbral area provides a different frame in which music develops with different hierarchies and priorities. Though the development of sound is necessarily bound to the physical method of production, it is not merely about the physical process, but the intersection of all these issues, musical, mental, and physical. If all is successful, I present an idea, and then develop it along parameters intrinsic to that material, taking into account the physical, acoustic, and psychological parameters of that material.

Pitch and register relationships become apparent any time sounds occur in proximity. While much of my solo music is not explicitly based in functional harmonic or melodic progressions, it certainly takes pitch relationships (and the consequences thereof) into account. More conventionally melodic material is based more on pitch set and intervallic relationships than harmonic sequences, and I am more interested in horizontal development over vertical. All said, pitch and timbre are closely related, and shifts in timbre can signal changing pitch relationships.

In solo music, I am not so concerned with metered rhythm as with the passing of time, flexible durations between events, and shifting energies. Every event will necessarily have its own requisite space. Playing alone, one need not remain beholden to an externally imposed (or gridded) idea of tempo or meter. Through non-metered pulse, I carve out sound in time,

without being tied to a grid; rhythms unfold over time. This approach is no doubt informed by both my work in free jazz (flexible pulse without explicit meter) and engagement with the music of the Romanian spectralists. I prefer for time to be organically flexible, following both musical and physical motion and reacting to the space.

I have developed an affinity for bouncing bow techniques beyond the standard *spiccato* many double bassists utilize. These range from extended forms of *jété* and ricochet to *rimbalzo* / gravity drops (and their inverse) to what Renaud Garcia-Fons calls *pizzicato con l'arco*.¹⁵ Each of these techniques offer different possibilities for articulation, timbre, and metrical subdivision. For example, the sound of the bow hair is more audible in the ricochet techniques where the bow traverses the length of the string vertically. The more horizontal bow motion involved, the greater in-the-string attack is available. These ricochet techniques allow for a rapid articulation (as well as controlled and accurate subdivision) of notes that gives a more organic (to my ear) sense of overall phrasing than ordinary *spiccato*.

I am also particularly fond of the distorted sounds available on the bass. These range from various gradations of *ponticello* to overpressure bowing, string noise (from the fingerboard), and multiphonic sounds.¹⁶ What is particularly interesting about the use of these sounds is the potential for controlled instability. With multiphonics, one can coax multiple harmonics to ring on a string at once, a rather unstable phenomena that can be controlled to great effect. *Pizzicato* string noise can be controlled and manipulated to provide percussive

¹⁵ Renaud Garcia-Fons. *3 pieces for double bass solo*, (Munich: Edition MAWI, 2003), 8.

¹⁶ Fernando Grillo was an early exponent of multiphonic techniques, and developed rather radical music in collaboration with Iancu Dumitrescu. More recently, Håkon Thelin developed a series of works utilizing multiphonics in a somewhat functional harmonic context, and has published extensive research in multiphonic locations and techniques.

(and even other pitched) content which may be considered undesirable in traditional classical or jazz pedagogies. Many of these unstable or transient-heavy sounds have been all but forced out of European art music (until recently), while they are welcome and even key elements of many musical cultures.

This music and its aesthetic territory is at the intersection of a number of musical and cultural traditions. Playing jazz (particularly free jazz) has clearly informed how I engage with time, rhythm, and developing lines, whether the situation is solo or group, and improvised or not. Other traditional musics have informed my melodic and rhythmic sensibilities, and all of this is part of the equation, regardless of how noisy or melodic the music is. Working on contemporary composed music has influenced formal and timbral concerns.

Chaos, Complexity, and Technique - Multiple layers of activity

Chaos and complexity are not only useful in theorizing about the performance of improvised music and the relationships that are juggled in performance. Quite literally, I am interested in creating fields of density, where multiple layers of activity interact in complex and chaotic ways. Individual layers may not be perceptible as such, and frequently they aren't in chaotic systems, but that reveals part of the strength (in my mind) of this line of thought. Through relatively simple input patterns, we arrive at complex and unpredictable results.

Much of the solo music that I've developed involves multiple layers of activity interacting simultaneously on technical, physical, and musical levels. First, consider how a

note can be articulated, and where. Then how the two things interact. In regards to its application on the bass, this is only possible if we get away from old double bass pedagogies of one hand producing the sound and the other activating it. Both hands are entirely capable of articulating sound in any location. So assuming a bow in one hand and nothing in the other, the bow can be used to bow, bounce off the string, play *col legno*, play beyond the bridge, strike or bow the body, and so on. The left hand can provide stopped or harmonic notes for the right hand, but even more so, it is capable of open or stopped *pizzicato* - itself harmonic or not, hammer ons, pull offs, all manner of *glissandi* and trills. Then there's the matter of how these two things interact. If we treat each hand as a separate entity, capable of articulating its own pattern, gesturally linked, interesting interferences result.

As an example, the bow is kept in (ir-)regular motion, bouncing on the strings, in a variety of locations, itself providing a variety of pitch and timbre variations due to the bow's ability to activate harmonics itself. Add to that left hand hammer ons, pull offs, and *pizzicati*; its own gestural content separate from the bow. This gives us two independent layers of activity, along with the "interference patterns" resultant of the interaction between the two. The bow can also travel beyond the bridge, adding a new set of notes and timbral variation to the palette. I am not suggesting that hands be blind to each other, but rather to allow them to act independently in coordination.

⊕ : LH hammer on ⊕ : arco behind bridge (o) : pizz behind finger (w/thumb)

Figure 1: Example of interfering layers of activity between hands

Phosphene

Phosphene consists of three main sonic areas that transform between each other.¹⁷ The first and primary area is a sort of dual-node harmonic trill achieved by placing the left hand thumb on a harmonic and using the fingers of the left hand to pluck the string on higher harmonic nodes (while bowing). This creates an effect similar to yodeling, where rapid alternation between the node of the thumb and the node of the fingers is articulated by both the left hand pizzicato and changes in bow direction/speed. Bow location and speed (including diagonal bowing) further modify resultant pitch. A similar area consists of single and dual node harmonic sequences and pull-offs in the lower positions played extremely *ponticello* while hammering a sequence of notes on lower strings.

¹⁷ To see this in the context of a larger performance, see <https://youtu.be/A7yT5IPzYh0?t=23m34s> at 23:34.

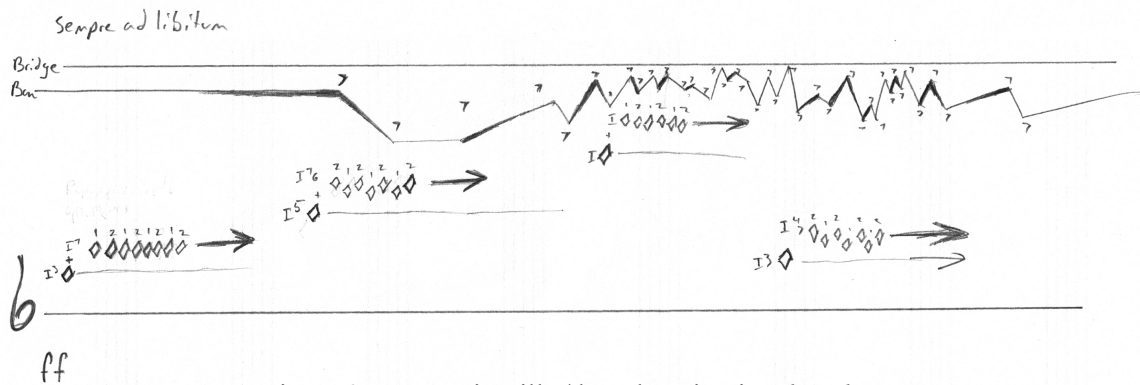


Figure 2: Harmonic trills / bow location in *Phosphene*

The second technique involves pulling the fourth string off the fingerboard and various types of overpressure and vertical bowing, resulting in very distorted, crunchy, and subharmonic sounds. Further, the bow travels across the bridge to the silk after lengths and back to create a fast phasing of pitch and noise. This technique transitions into the third area, bowing on the tailpiece. Multiple pitches can be obtained from the tailpiece, and the pitch of the tailpiece can also be blended with the sound of each string (beyond the bridge), individually or together. Pressure, speed, and location on the silk of the strings are manipulated to achieve distorted multiphonic sounds.

Phosphene begins with the sound of the bow on the string, with both left hand and bow location changing the pitch of the “white sound.” The left hand trill is gradually introduced, with the bow only occasionally articulating the harmonic pitch. This builds into a more consistent activation of harmonics and increased sound density. The location and pressure of the bow is then varied to widen the spectra further, activating different harmonics and multiphonics, and the crushed string/tailpiece segments follow.

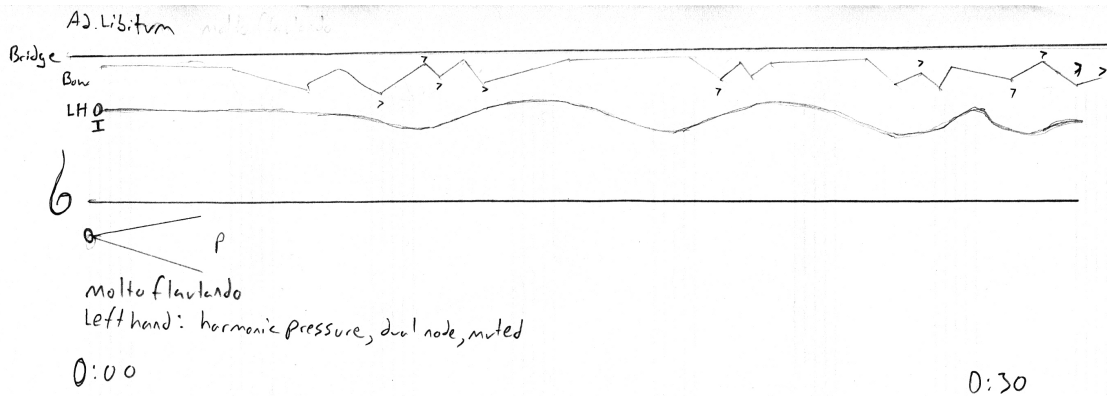


Figure 3: Opening, “white sound” of *Phosphene*

When I first began working on this piece, the title *Phosphene* came to mind and seemed appropriate. The cascade of harmonics resulting from the dual node *pizzicato*/trill reminded me of visual noise and the play of colors one can see with eyes closed. The performative arc of the piece takes the performer from the high registers of the bass down to the lower positions (though the resultant music occupies territory both low and extremely high), and back higher yet - beyond the bridge to the tailpiece.

Transmogrificant I

Transmogrificant I explores various types of staccato *jété* bowing and was a vehicle for developing a sort of infinite *rimbalzo* / gravity drop bow technique I’ve been refining in recent years.¹⁸ Relatively simple melodic statements are filtered through different bowing techniques - very staccato *jété* to *flautando*, *normale*, *ponticello*, and *ricochet* - with soft *pizzicato* interjections above the left hand. In the course of a melodic statement, the timbre

¹⁸ To hear this piece, see <https://kylemotl.bandcamp.com/track/transmogrificant-i>

will shift from *ponticello* to *tasto*, and from articulated to legato. Between sets of notated phrases, there is space for improvisation; in one case with an arc given, the second time completely open. In these open sections, I utilize various bouncing and ricochet techniques to carve out varying densities.

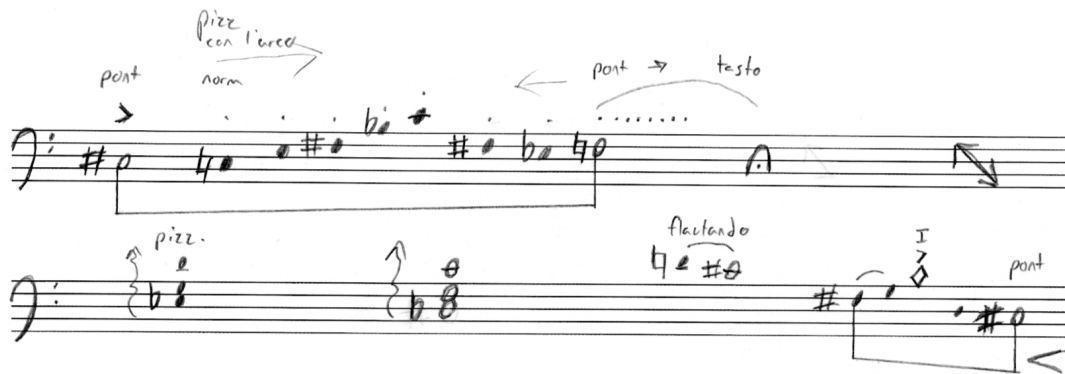


Figure 4: Opening of *Transmogrificat I*

The improvised section of *Transmogrificat I* utilizes a technique for sustained ricochet bowing on the double bass. The concept blends the technique of a *jété* or ricochet bowing with the *rimbalzo*, or what Mark Dresser calls “gravity drops.”¹⁹ By dropping the bow on a string, letting the bow naturally bounce (it is a spring, after all) and allowing the hand to follow the bow down, keeping the bow parallel, we achieve the standard *rimbalzo*. The same can be articulated in reverse: starting closer to the bridge, with an upward stroke, followed by gradually raising the hand consistent with the bow. In neither of these situations does the hand need to articulate any of the attacks with the bow.

¹⁹ Mark Dresser, *Guts*, (Kadima Collective, 2010), DVD.

These gestures can be combined to achieve a continual sort of “roll” with the bow. To change directions, we must change the angle of the bow, pulling the wrist inwards while pulling the bow *sul tasto*, and turning the palm out while moving towards *sul ponticello*. The hand simply follows the direction the bow is heading. With practice, weight can be added for more accent, volume, and to accentuate timbral shifts.

This technique can be developed in terms of articulating string crossings, from gradual to rapid. Double stops are stable, and provide the possibility to explore sustained harmonic possibilities. A wide range in the spectrum between noise and pitch is available with this technique. We can do these sweeps along a muted string, and gradually introduce pitch content by transitioning toward a fingered pitch, and then by introducing more horizontal motion in the bow. The more horizontal motion, the more clear the pitch content, until a regular ricochet is achieved.

The pitch material of *Transmogrificant I* is derived from transformations of an initial hexatonic set created by C and F# triads. The final phrase is the retrograde of the first.

ax[i]on

ax[i]on explores a sequence of harmonic and stopped note dyads activated by ricochet bowing in a shifting rhythmic frame.²⁰ Each change of direction of the bow articulates a new dyad, and the rhythm filters through different tuplet subdivisions. For example, the fourth phrase follows the sequence: 4:1, 5:1, 3:2, 4:5, 4:.5 (See Figure 5). This phrase is the

²⁰ To see this in context of a larger performance, see <https://youtu.be/A7yT5IPzYh0?t=36m> at 36:00 or hear it on its own at <https://kylemotl.bandcamp.com/track/ax-i-on>

generative seed for much of the piece; it is deconstructed to form the preceding and following phrases.

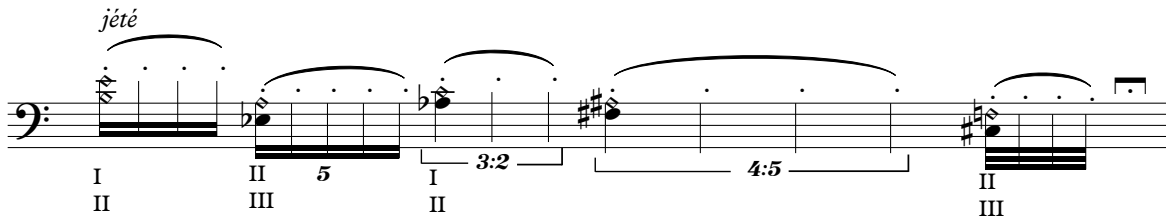


Figure 5: Sequence of dyads in *ax[i]on*

In addition to harmonic-stopped note dyads, *ax[i]on* utilizes sustained multiphonic-stopped note dyads. The main dyad is that of a stopped C# on the A string with a multiphonic containing the fundamental and 6th partials of the D string. This results in a very complex distorted sonority with beating patterns inside of it (from the half step interval). These multiphonics combined with the use of *ricochet* bowing throughout highlight my interest in the control of unstable sounds. To my ear, the alternation of groupings of four and five notes to a *ricochet* bowing gives a more organic feel to the phrases, than had they simply been played *spiccato*. The impulse at the beginning of every group of notes, followed by slight decrescendo in every bowing gives focus to the larger scale breath of the phrases, rather than individual articulation of each attack.

Panjandrums!

Extrapolated from *Nothing but Panjandrums*, originally written for my piano trio, *Panjandrums!* focuses on the development of the theme as well as variations derived from the tune's basslines, with a pizzicato bi-tone section for good measure.²¹ Much of the improvisation develops from variations on intervallic sequences key to the theme, including transpositions of 1 - flat 2 - 4 - 5, and a sequence of 7-3-1 arpeggios with open strings between (the same intervallic set referred to earlier).



Figure 6: Opening of *Panjandrums!*

Other works on *Transmogrification* explore various sonorities related to *ricochet* bow techniques and multiphonics. Only 4 of 15 tracks utilize preparations on the bass: *Gimblegyre* utilizes a mallet stuck in the strings, the oscillation of which allows a high wobbly trill from the bow. *Dnomla*, *Gnomon*, and *Gonx* utilize blue tack on the strings to create multiphonic effects and allow pitches to be articulated on either side of the preparation.

²¹ To see this in context, see <https://youtu.be/A7yT5IPzYh0?t=8m3s> at 8:53.

Two Performances

What follows is a structural analysis of two solo recitals I gave on February 24 and April 12, 2017, and how they relate to each other and to works recorded on *Transmogrification*. It should be noted that no definitive form was planned for either performance and these analyses were done approximately a year after the performance, so it is indicative of my perceived structure, not necessarily intended. I note textural and technical areas and track where thematic content enters. To my ears, the first concert features more transitional content which differs from surrounding sections, while the later seems to morph more organically.

In both of these performances (indeed, most all of the solo concerts I do), I know at the outset where I'm going to start and where I'm going to end. I know what materials I will generally engage with, but have no specific order or agenda planned. There are some tendencies in transition, but I think any material could be reasonably connected to other materials. I consciously chose to start the second concert differently from the first, and for whatever reason, that has become the normal mode of beginning lately. Both beginnings have their strengths: beginning with *Panjandrums* offers a clear melodic and pitch based content that is transformed. On the other hand, beginning with phrases of dense materials that cross lots of timbral areas and then pulling back to focus on slower developing ideas frames the music in another way. Both performances end with material similar to *Multiferrous*, which is how I ended the record, *Transmogrification*.

February 24

0:00 Panjandrums

2:16 improvisation post-theme, allusions to bass line

3:45 bi-tone tapping

4:45 triple stops moving towards density/velocity

6:00 return to theme

6:20 ricochet / gravity bowing

7:40 constant ricochet with left hand tapping

8:10 ricochet phrases give way to tremolo, ricochet returns throughout following sections

10:00 harmonics of E string, bouncing bow

10:30 left hand buzz (pressure change) with bow tapping

11:00 more pitch, transitioning to beyond the bridge

12:30 ricochet + buzz

13:00 melodic phrases, normal bowing. Add double stops, beating.

13:40 microtonal phrases

14:20 ponticello, return to ricochet, add left hand hammer ons

15:20 bouncing bow with metal chopstick on string

16:20 harmonic + stopped note dyads, transition into *ax[i]on*

16:50 *ax[i]on* theme stated

18:20 rapid tremolo, transition to false harmonic double stops

20:00 bow scrapes + left hand hammer ons, transition to *Phosphene*

21:00 *Phosphene*

23:40 softer in lower position + hammer ons

25:11 tailpiece bowing

27:00 harmonics + string crunch + afterlength bowing, return to initial dynamic

28:14 tailpiece + left hand pizz

28:53 transitional material; rapid melodic pizz

30:20 *Scintillionic* - harmonics

33:10 transition to left hand tapping + right hand harmonics

35:20 transitional material; pizz double stops into density/velocity

37:00 soft melodic content, preparing blue tack section

38:20 prepared bass - blue tack - pizz + bowing

41:25 *Transmogrificant I*

44:00 transition - insert bow in strings

47:30 mallet in string (*Gimblegyre*)

51:10 chopsticks - battuto & in strings

54:00-56:00 juxtaposition of previous materials, removal of preparations, rapid pizz,

sweeping of bow over bridge, melodic material

56:40 harmonics, detuning

57:20 *Multiferrous* ending material

April 12²²

0:00 harmonic accents, bouncing bow, left hand pizz

1:50 sequence of E string harmonics, add accents and staccato

3:30 bouncing staccato harmonics

4:40 harmonics + after length of string

5:00 stopped notes, shorter gestures; rapid bow bouncing + left hand pizz

5:40 pizz, double stop accents to bartok pizz

8:00 *Panjandrums* theme

10:50 glissandi

11:30 harmonics, bi-tone tapping

13:30 harmonics, new melodic sequence, return to *Panjandrums* theme

14:50 left hand buzz (pressure) bow tapping

15:40 + afterlength

16:40 slower + longer bouncing phrases

17:00 gravity rolls

17:45 constant bouncing leading to longer phrases, add harmonics

19:00 density/velocity - bouncing bow, left hand tapping, bow location

22:00 more space

23:30 *Phosphene*

30:30 battuto with hair to bouncing between side of bass and string

32:20 soft melodic material, tasto, add mute

²² For video of this entire performance, see <https://youtu.be/A7yT5IPzYh0>

35:30 transition

36:00 *ax[i]on*

39:40 M9 false harmonic double stops, return to theme

40:50 tapping + harmonics

43:50 *Scintillionic*

48:20 pizzicato density/velocity

48:40 + bow, move across bridge

49:30 bow in strings

52:40 multiphonics, rattle

54:40 battuto + col legno tratto

55:40 nut of bow rattle in string

56:00 pizz density/velocity

56:50 accented double stops with mallet

58:50 4ths

59:20 mallet in strings, pizz + wobble

59:50 arco + wobble, *Gimblegyre*

61:30 bow mallet, add strings

63:20 space, harmonic bow accents, staccato bow, references to beginning

65:50 *Multiferrous*, ending

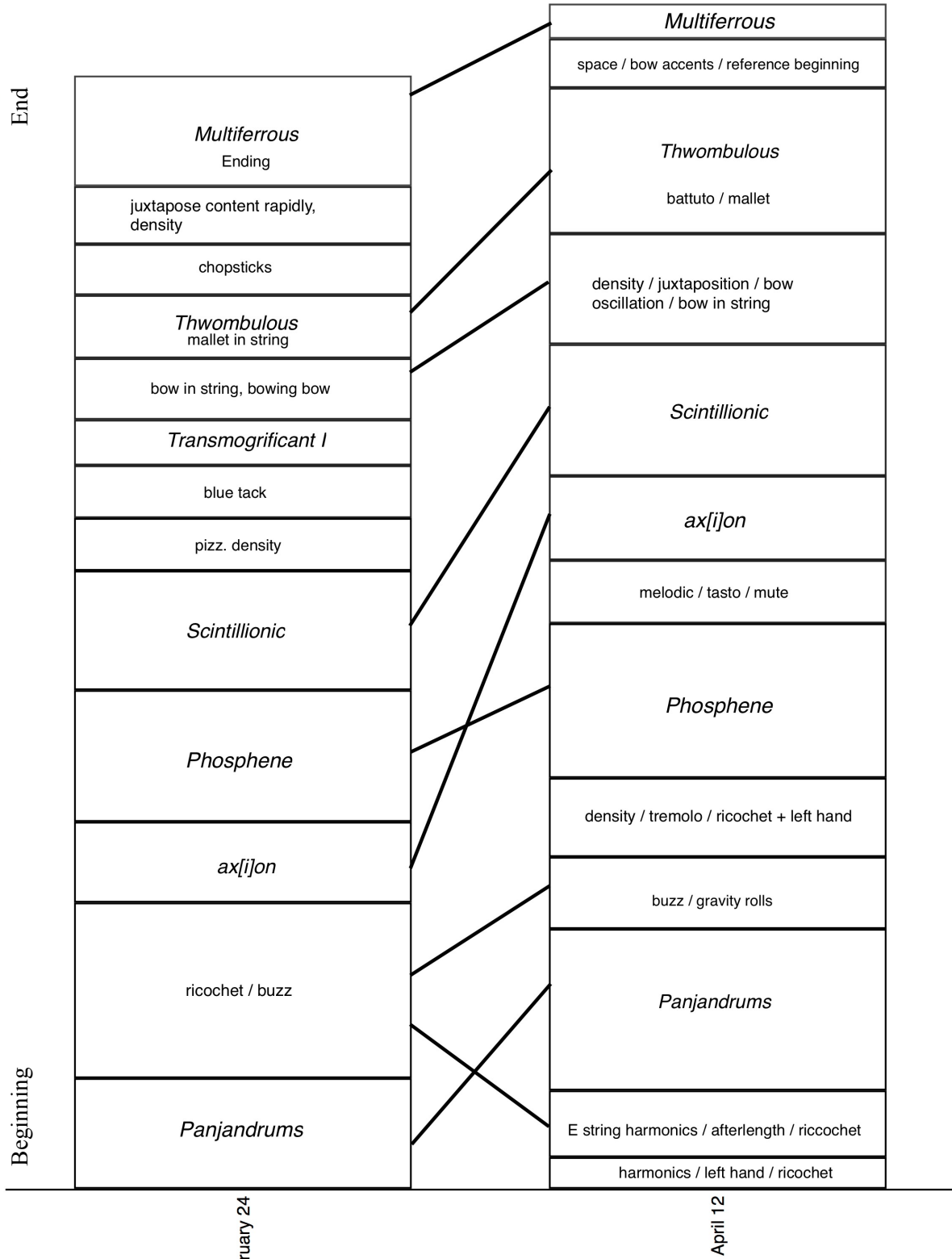


Figure 9: Comparison of two performances

Performances, Reception, and the Future

My solo music continues to develop through live performance and personal practice. I have presented this music in a variety of settings and occasions from conferences and festivals to house concerts and bars, all around the United States, in Canada, Mexico, and more. I have presented this music on its own, and in programs alongside the music of other composers, including Iancu Dumitrescu, Ana-Maria Avram, Horatiu Radulescu, Caroline Louise Miller, Sofia Gubaidulina, and others. The following are reflections after a solo tour of the southwest United States, the performances dates and locations are as follows:

March 11, 2018: Flagstaff, AZ - Interference Series @ KickStand

March 12, 2018: Pueblo, CO - Pueblo Arts Alliance Annex

March 13, 2018: Denver, CO - Deer Pile

March 15, 2018: Kansas City, MO - The Ship

March 16, 2018: Kansas City, MO - Woodyard BBQ

March 17, 2018: Tulsa, OK - pH Community House

March 18, 2018: Dallas, TX - Top Ten Records

March 19, 2018: Houston, TX - Nameless Sound @ Lawndale

March 20, 2018: Denton, TX - Andy's Bar

Thinking back on it, it cannot be overstated how important community and people are to the presentation of this music. Though I drove around a corner of the country alone with

my bass, in every location there was some kind of personal connection that followed the performance (or enabled it in the first place). Without all of the communities in these cities, and people willing to expand that community and welcome others, none of this touring would be possible. Putting such as tour in the first place is a matter of personal relationships: everything was set up by reaching out to someone I knew or to a friend of a friend.

Hanging out and talking with people after the show is almost as personally valuable than the performance itself, maybe even more so on some level. Invaluable conversations were had, and in some cases, I was introduced to incredible literature, writing, and music I may not have discovered otherwise.

All of these concerts featured set-length performances, except for the show in Pueblo, Colorado. In Pueblo, cellist Bob Marsh and I alternated short improvised pieces solos, followed by a few longer duos. Bob is such a generous person and sensitive musician, I felt that alternating solos in such a way made me play more musically than I may have otherwise.

The locations varied greatly: Flagstaff was a concert series in a coffee shop after hours, Pueblo and Houston were in art galleries, Dallas in a record store, Dallas in a dive bar, Tulsa in a community/arts space, Denver in a performance venue, Kansas City in a former speakeasy (The Ship) and a barbecue restaurant (Woodyard). Despite being during a basketball broadcast, the show at the barbecue may have had the most intimate, engaged audience, despite the occasional waiter walking by. A back room of the restaurant was closed off, and the audience was mostly non-musicians (or at least, not musicians who regularly engaged with the avant garde side of things). The other venue in Kansas City, The Ship, may

have been the most difficult for solo bass on the tour: it was a very loud space with a party happening on the other side of the room. The amplified bass probably made the party even louder. Despite this, there was a dedicated group of receptive listeners up front.

At Andy's Bar in Denton, I had the unusual experience of playing very amplified in a mostly-quiet dive bar full of attentive college age students, other touring bands, and a few professors. In Tulsa, I shared a bill with two bands on the nosier side of the rock spectrum. It was a very appreciative audience, and on more than one occasion I was asked why I would come through Tulsa.

Future Investigations

There are many potential avenues for exploration with this solo music. I would like to investigate how particular microphone placement techniques can open new musical territory, and how to translate this into live performance: a spatial orchestration of the bass. The techniques involving separation of hands articulating interfering ideas/materials can be honed and developed further, through careful and considered approach. I intend on continuing previous investigations of the polyphonic applications of *pizzicato* false harmonics, and further, developing a pedagogy around that technique. Most of all, I hope to continue presenting this music and allowing it to develop in whatever way seems most appropriate at the time.

APPENDIX

Nothing but Panjandrums

Kyle Motl

Open improvisation, use figures in boxes to develop material, but don't feel bound to them.
To cue, converge on 7/16 rhythm and continue.

Three boxed musical figures for improvisation. The first figure is a five-note melodic line in G major (G4, A4, B4, C5, B4). The second figure is a four-note bass line in G major (G3, A3, B3, C4). The third figure is a four-note bass line in G major with a flat on the second note (G3, F3, E3, D3).

3 $\text{♩} = 98 - 120$

Measures 3-5. Measure 3 is in 7/16 time. Measure 4 is in 3/2 time. Measure 5 is in 4/4 time.

6

Measures 6-8. Measure 6 is in 4/4 time. Measure 7 is in 3/4 time. Measure 8 is in 4/4 time.

9

Measures 9-11. Measure 9 is in 4/4 time. Measure 10 is in 3/2 time. Measure 11 is in 4/4 time.

12

Measures 12-14. Measure 12 is in 4/4 time. Measure 13 is in 3/4 time. Measure 14 is in 3/2 time.

15 Fine

Measures 15-17. Measure 15 is in 3/4 time. Measure 16 is in 4/4 time. Measure 17 is in 7/16 time.

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18 8^{va} -----

Musical notation for measures 18-22. Treble clef, 16/16 time signature. Bass clef, 16/16 time signature. A dotted line above the staff indicates an octave transposition for the first measure.

23 Open improvisation. 5/16 figure cues next section.

Musical notation for measures 23-26. Treble clef, 4/4 time signature. Bass clef, 4/4 time signature. Measure 23 is a whole rest. Measures 24-26 show a 5/16 figure cue.

27

Musical notation for measures 27-30. Treble clef, 5/4 time signature. Bass clef, 5/4 time signature.

30 Open in break

Musical notation for measures 30-33. Treble clef, 5/4 time signature. Bass clef, 5/4 time signature.

33

Musical notation for measures 33-36. Treble clef, 5/4 time signature. Bass clef, 5/4 time signature.

36

Musical notation for measures 36-39. Treble clef, 5/4 time signature. Bass clef, 5/4 time signature.

39

Musical notation for measures 39-42. Treble clef, 5/4 time signature. Bass clef, 5/4 time signature.

42

47

51

Continue figure, expand with improvisation
DC al fine

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