

466708
Pages: 97-113 UUA
Exempt

UBY/UTBG ILL – Lending

Call #: ML 1.D67x

Location: 4TH MUSIC

Journal Title: The double reed.

Volume: 36 Issue: 1

Month/Year: 2013 Pages: 97-113

Article Author: Ryan D. Romine

Article Title: ElectroBassoonica

ILL Number: 207907618



Lending String:

*UBY,UUM,UUO,AZS,AZN,AZU,COD

Borrower: UUA

SHERRATT LIBRARY - ILL

SOUTHERN UTAH UNIVERSITY

351 W UNIVERSITY BLVD

CEDAR CITY, Utah 84720

Odyssey: 134.250.60.4

Email: ill@usu.edu

5/5/2021 9:25 AM

BYU

BRIGHAM YOUNG
UNIVERSITY

Harold B. Lee Library

Interlibrary Loan
Copy Center

For Odyssey Receipt Problems:

Phone: 801-422-2953

Fax: 801-422-0471

Email: ill_copy@byu.edu

Odyssey Problem Report

If you have experienced a problem in the delivery of the requested item, please contact us within **Five Business Days** with the following information:

ILL#: _____

Your OCLC Symbol: _____

Date of Receipt: _____

Please specify if:

Pages were missing pp. ____ to ____

Edges were cut off pp. ____ to ____

Illegible copy, resend entire item

Wrong article sent

Other (explain): _____

NOTICE:

This material may be
protected by copyright
law Title 17 U.S. Code

ELECTROBASSOONICA

Compiled by Ryan D. Romine
Winchester, Virginia

Note from the Bassoon Editor:

At the end of last school year, I, in a fit of bravery, commissioned a talented young composer named Greg Brown to write a piece for bassoon, piano, ...and electronics. Pre-summer concept and format discussions went swimmingly, and then summer and the beginning of fall semester came with their usual distractions. Only when Mr. Brown's twenty-minute opus hit my desk this past November did it truly sink in that those original nebulous "good ideas" were actually going to have to become a reality—that I was going to have to learn quite a bit about a field of music that to me was woefully quite foreign. Multiphonics, glissandi, flutter-tonguing—fine. But, how *does* one mic a blasted bassoon? How does adding a computer to one's ensemble affect timing, texture, balance?

In the process of experimenting and reaching out to colleagues to find answers to my own questions, the editor in my mind came to realize that "this would make a great article for the Journal!" Collected below, then, are some lovely and affirming questionnaire responses from some of America's leading bassoon+electronics performers. Ranging from established giants in the field to quietly influential inventor-performers, from dedicated and thoughtful performer-professors to cutting-edge players who are themselves still students, these nine wonderful respondents share some of their best technical advice; and above all else, their unanimous admonition to put any misgivings aside and to begin exploring this incredibly rich frontier of our art.



BRAD BALLIETT

What is your current job?

I am a freelancer in New York City, which means that my career is built from a lot of different projects. I'm an Artistic Director of The Declassified, a new chamber collective in New York City specializing in international residencies and creative community projects; I also do a good deal of performance and teaching for The Academy and Musical Connections (two community programs of Carnegie Hall) and have just joined the Teaching Artist faculty for the New York Philharmonic. I continue to perform with a wide variety of interesting ensembles in New York and the surrounding area, including Metropolis Ensemble, Argento New Music, and the Hartford Symphony Orchestra. I'm also very active as a composer.

How do electronics intersect with your career?

I love using electronics in my compositions, especially as a small component of a larger

acoustic ensemble—it is fascinating to investigate the way that electronic and acoustic sounds can interact and make each other sound unique and new. I also enjoy playing electric bassoon in solo shows and pop music performances—not only do the electronics help the bassoon to cut through the texture in a noisy atmosphere, but it also creates some new sounds and encourages audience members to ask questions and learn more about the bassoon.

What sparked your interest in using electronics in music?

Stockhausen was the first composer that really grabbed me and made me excited about the possibilities of electrifying the bassoon. I also wanted a way to perform in rock and hip-hop ensembles, but still be audible. Seeing friends electrifying acoustic instruments with cool effects sealed the deal—I thought, 'I want to do that with the bassoon'.

What is your favorite (or the most important) piece that includes bassoon and electronics?

Katie Young's band Pretty Monsters has made a lot of cool music for bassoon and electronics. One classic piece that I don't think I'll ever stop loving is the bassoon version of Pierre Boulez's *Dialogue de l'ombre double*. It is intensely satisfying to hear.

How has working with electronics impacted your "regular" bassoon playing?

An electric bassoon creates sounds that, timbre-wise, are possible to closely approximate using other means. What makes the electric bassoon unique, then, are all of the same things less related to timbre that make the 'normal' bassoon unique—the quality of the articulation, the characteristic figures and passagework that sound so bassoon-y, and the indescribable quality of the bassoon legato. Realizing this made me appreciate all the things I loved about the bassoon when I started playing, and helped me to fall in love with the instrument all over again.

What is your preferred setup (brands/models of mic, amp, etc.)?

My setup is very simple. I use the bocal pickup kit with adapter and cord made by Telex and available through Forrests Music. When I first started using electronics, I used a microphone, but quickly realized the many advantages to a bocal pickup, not least of which is that every note in the entire range is picked up equally (and that the preamp is built-in). Forrests also offers a Fox 2C bocal with the docking port for the pickup already built-in—a nice convenience. To process the sound, I use an old RP-5 guitar board. There are lots of great newer devices out there, but I have fun trying to create the most unique possible sounds I can out of this vintage equipment. When I'm recording, I process the pre-recorded sound using Ableton Live, a program in which the sky is the limit in terms of possible sounds—if you can imagine it, you can make it happen.

Any advice for people looking to become better acquainted with using electronics in their own music making? (Things to do/Things to NOT do, etc.)

Have fun and try a lot of things! Get very comfortable with your equipment and learn all the possibilities—AND the limitations.

Contact:

www.bradballiett.com

Watch Brad perform his Etude in A Minor on electric bassoon:

www.youtube.com/watch?v=FW-9Uao2dQM



RACHEL ELLIOTT

What is your current job?

Freelance bassoonist

Lecturer at Duke University

Member of Clogs, Dark in the Song, Tuple

How do electronics intersect with your career?

Most of my playing is normal, acoustic chamber music. But I do amplify with my group Clogs (viola, bassoon, guitar, percussion) and occasionally for other projects, including electronica with composer Alex Kotch, and on some occasions with Dark in the Song and Tuple. I've also played amplified in rock shows with Sufjan Stevens and The National (in concert hall, stadium, and outdoor festival settings).

What sparked your interest in using electronics in music?

I got into amplifying the bassoon because of Clogs, a new music/improvising group that formed in 1999. We spent our first year struggling to balance our disparate instruments, particularly with the classical guitar, which doesn't hold up well against bassoon and percussion. We realized we needed to amplify so that we could all play more comfortably. That led me to years of experimenting with how to amplify the bassoon.

I also play a few pieces with amplified bassoon plus electronics, but I wouldn't say that's my niche. Mostly, I amplify when necessary, for contextual and balance reasons. It allows me to perform in clubs and more casual concert settings where the audience is not necessarily interested in a quiet, classical concert experience, but wants to hang out, talk and drink while hearing live music. I think all of these are valid and interesting concert experiences, and enjoy them as a performer and audience member myself.

What is your favorite (or the most important) piece that includes bassoon and electronics?

I have to plug Alex Kotch's "Techno Music for Bassoon and Electronica" here. It's a piece for solo bassoon and tape, or bassoon and live electronics (with Alex processing in Ableton Live). I premiered the piece in 2010, and we've gone through a series of revisions to tighten up the part and subsequent performances. The piece opens with a short improvisation over pedal multiphonics. There are other sections with optional improvisation and lots of funky, composed licks, as well as a few solos in the electronics where the bassoonist gets to rest. Alex is interested in the intersection between acoustic instruments and electronic dance music, and having played several of his electro-acoustic pieces, I'm really impressed with the direction he's taking things.

My other favorite project to date with electronics has been working with a Max/MSP patch designed by composer Nicolas Scherzinger. His patch essentially takes on the role of one performer within a solo or group improvisation. We play acoustically, but simultaneously send our signal (from a microphone or pickup) into the computer. The Max patch applies dozens of live audio processes to our sounds and sends them back into the house (through a PA system) almost instantaneously, becoming a sort of "fifth" instrument which is definitely not human, but sounds sometimes very much like one of the acoustic instruments, and other times completely unlike any of us. As chamber musicians and improvis-

ers, we are interacting with each other all the time, and also responding to our mutated sounds created by the computer. Nic's "piece" is one of the most successful integrations of live processing I've heard, and really satisfying to work with as an improviser.

How has working with electronics impacted your "regular" bassoon playing?

I am always so happy to go back to my favorite bocal and "normal" sound when I'm playing acoustically. Recently, I've been working on my quiet playing. It's easier not to play really quietly (!) but I'm pushing myself to explore the possibilities. I just performed the Saint-Saëns *Sonata* and played the opening of the 3rd movement far more quietly than I'd ever considered, thanks to the wonderful pianist I was working with who allowed me the room.

What is your preferred setup (brands/models of mic, amp, etc.)?

I'm using the Telex pickup from Forrests, which, as Trent Jacobs points out, is not actually a pickup. (See his 1/19/2008 thread on the IDRS forum: <http://www.idrs.org/IDRSBBS/viewtopic.php?id=2987>)

I plug into (optional) foot pedals including a Line6 Loop Station and Octaviser. From these, the signal goes into a DI (direct input) box and straight to the house soundboard. The Telex pickup gives me a stable means of amplifying the full range of the instrument, without the need for a pre-amp. I can play sitting or standing, and move around freely on stage without having to move microphones. It has allowed me to play with electric guitar and a wide array of percussion in a variety of settings, including large indoor and outdoor festival stages and clubs where the sound reinforcement level can get quite high. The biggest advantage of using a pickup is that the bassoon can be amplified to balance evenly with the electric guitar, cymbals, etc. without running into feedback.

The downside, which is no secret, is that your amplified sound is not a classic "bassoon" sound, but rather an electric bassoon sound. If you accept that you're playing an entirely different instrument, you'll probably be happier with your setup. Depending on the size of the venue and setting, you might well prefer to use microphones instead of a bocal pickup, as they will give you a truer bassoon sound.

Any advice for people looking to become better acquainted with using electronics in their own music making? (Things to do/Things to NOT do, etc.)

You can amplify the bassoon using microphone(s), contact mic(s), or a bocal pickup. I haven't had any experience with contact mics, although I recently heard Wendy Holdaway performing with very good-sounding contact mics. I've summarized my experiences to date working with microphones and bocal pickups below.

Microphones

The advantage of microphones is that they provide the best, most realistic amplified bassoon sound. The disadvantage is their risk of feedback, particularly as the overall volume on stage rises. There is also a minor issue of restricted movement when playing into a microphone, as opposed to using clip-on mics or pickups.

The most stable microphone setup I've found is using two Shure SM57 dynamic microphones. One is placed high (near the bell) and slightly off to the left; the other is placed lower and roughly in front of the boot/tenor joints. Together, these two mics do a reasonable job of capturing the range of the bassoon. It's hard not to get a few notes "woofing" out louder than the others because the bassoon is so directional, but the SM57s are extremely reliable and do a pretty successful job. They are also quite affordable, and are completely standard gear in music clubs everywhere. A spatial issue to consider is developing your awareness of where the microphones are so that you don't swing your bell and knock into a

microphone, or step too close or too far from the optimal distance.

I've also used the LCM 83 clip-on condenser mic system (with two condenser mics and a pre-amp), which creates a natural sounding amplified bassoon tone. Unfortunately, it is prone to feedback when the electric guitar and percussion get louder. I have seen Dana Jessen and Sara Schoenbeck use the system successfully in other contemporary chamber music settings, but I found it was too unreliable for my work with Clogs.

Bocal Pickups

When I learned about the Telex pickup a few years ago, I didn't want to take chances drilling a hole in my regular bocal, so I bought a Fox bocal to test the pickup and see if it would work for me. Forrests now offers a Fox bocal with a pickup already installed, but at the time, I sent my bocal and pickup to my repair person and he installed it precisely according to the instructions, about half an inch above the bocal vent.

Unfortunately, the circumference of the pickup is large enough that it bumps into the whisper key, making it impossible to fully insert the bocal into the tenor joint when using the pickup. This is a huge problem, and an unwelcome oversight by Telex and Forrests. I hope they have corrected this installation advice.

The good news was I could finally balance with Clogs and be heard in the loud bits. Audiences and reviewers started to comment on the bassoon much more than in the past, since previously I had been mixed more quietly in order to avoid feedback issues.

The downside, of course, was the constant struggle to overcome the pitch issues inherent with this setup. Eventually I was able to purchase a used Heckel bocal with a darker sound (a plus when using these pickups). This time I had a new Telex pickup installed on the back of the bocal (rotated 90 degrees counter-clockwise from the placement suggested in the original instructions). Since my first experiment, I had also seen **Mike Rabinowitz** play and was able to get his advice about pickup placement, which was very helpful. Another pickup placement issue to be aware of is if your bassoon has a locking mechanism between the tenor and long joints—I've seen instances where the bocal pickup bumps into this, forcing you to place your bocal at an angle that may not be optimal for your comfort.

In my bassoon group, Dark in the Song, some of us use Telex pickups and some use Little-Jake pickups. I think we all agree that there is no perfect sounding pickup, and each has its advantages. The Telex has a much stronger signal, but sounds honkier and more 'electronic' than the Little-Jake. I mellow out the sound a bit by running my signal through a Line6 Loop Station before going to the DI box (even if I'm not using a loop or delay effect), and good sound engineers can improve the sound with EQ modifications and reverb. The Little-Jake has a much darker, mellower sound but you will need to use a pre-amp to boost the signal strength, and tweak the EQ to reduce the bass. To my ear, the Little-Jake sounds like there's a pillow around the bassoon...it's completely inoffensive, but also a little dull sounding. I think we're all still searching for a better sounding solution.

Extension Cables

One other minor note is that the Little-Jake pickup has a short cable that is meant to plug into a pre-amp clipped onto your waist. Take note, ladies, as this affects your wardrobe choices. For my height, the Telex pickup comes with a cable which is just shy of being a comfortable length for standing, so I plug the pickup cable into a headphone extension cable in order to move freely while standing. I'm sure you could do the same with the Little-Jake, and place the pre-amp on the floor if you prefer not to wear the pre-amp while playing.



PAUL HANSON

What is your current job?

Independent Music Professional with Bela Fleck and the Flecktones, DAVKA, Dennis Chambers, Peter Erskine and others

Former Electric Bassoonist/Duduk player with Cirque Du Soleil ZED Tokyo

How do electronics intersect with your career?

Where do I start? Because I had early access to a very high quality pressure transducer I was able to start to play bassoon in Afro-Cuban bands in the mid-80s, jazz groups after that, fusion groups, contemporary music ensembles playing non-improvised music, pop groups, et al.

What sparked your interest in using electronics in music?

Jimi Hendrix and the fact that multiphonics on bassoon sounded cool through a distortion pedal when I was 19 years old! There are things tonally that bassoon can do that saxophones can't. The range of the bassoon, its role in baroque music as a parallel for funk music, the tone acoustically, all combined with high quality electronics do it for me.

What is your favorite (or the most important) piece that includes bassoon and electronics?

Favorite? Before I started doing it myself, the Belgian band "Univers Zero" had an amazing bassoonist; and the band that inspired me to start was a band called CARTOON with Herbert Diamant on electric bassoon. This is a hard question for me to answer being that there are a few pieces I've done that I really like. I'm not up on any modern classical pieces with electronics—I tend not to be an 'avante-garde' guy.

I love what some players such as **Jim Rodgers**, **Trent Jacobs**, and **Mark Eubanks** have done. If I had to recommend two pieces of my own, I'd say "Inner Openings" from *The Last Romantics* or "Rite of Scorpio" from my album *Voodoo Suite*. Again, I probably shouldn't answer with my own pieces but with that said, I'm so happy more are doing work in the field!

How has working with electronics impacted your "regular" bassoon playing?

Well, my 'regular' playing can get quite affected if I am not careful to keep one foot in my classical training in terms of tone, air support, intonation. To me, the two modes of playing are almost different instruments. The electric bassoon can be such a chameleon; as it can be like a 'low' soprano sax, a guitar, a synth. What has been an issue that has made me better as a bassoonist is to also be active in music that's not electronic from time to time.

In jazz and blues-based music, a lot can be done to emulate what sax players do. As reed players, we all emulate great jazz sax playing and so often the inflections on bassoon can sometimes fool people into thinking they're hearing some sort of 'wood sax'. However, when I play for people what I do on bassoon and then do the same on my sax, the differences in tone become much clearer.

What I've found is that the bassoon HAS ITS OWN UNIQUE VOICE. This is why the direction I've tried to take in 'jazz' bassoon or 'funk' or 'world' bassoon is to not necessarily

duplicate what has already been done on saxophone but to find styles and situations that fit well with bassoon. For example, I perform in a group called "DAVKA" that consists of a violin, cello, hand drums, and bassoon. We groove like a jazz group but we can also sound like a chamber music group. We are not as loud as a group with a drum set, jazz bass, and piano—and that's fine. If the volume is not loud, you don't need to hook up electronics to your bassoon but you need to use good condenser microphones attached in the right places on the bassoon to be heard in most halls. And to me that's not really 'electric' bassoon—that's bassoon on some good microphones.

Other situations I love are loud funk/rock bands where I get to use my pickup systems with guitar effects and just go to town playing loud and live. Usually in that setup, the musical is somewhat more rhythmically rather than harmonically complex. Funk on bassoon is fantastic (the key of E is a great key to improvise in a funk/jazz/rock context). Usually, the chord changes in that type of music don't change every two beats as in bebop. I can play bebop bassoon but it's not my favorite style as I am also a sax player and sax just gets to those note choices easier for bebop. But I would still do bebop in a mixed ensemble.

The main thing is to arrange your improvised music on bassoon for the situation that will allow the bassoon's qualities to come through best. For me, that means TONE and SINGING-NESS and FUNKY stuff with the RANGE of the bassoon. And it works both in a chamber situation as well as a loud rock club.

What is your preferred setup (brands/models of mic, amp, etc.)?

What I use is something called a "flat response audio pickup" made by Arnie Lazarus about 30 years ago—FRAP for short. This is a "pressure transducer" that is totally obsolete. The next best thing is really not bad at all—actually, very good. It's the Trent Jacobs Little-Jake and it's available at www.forrestsmusic.com

Separate from a pickup type of transducer that screws into a hole in your bocal (which will NOT ruin your bocal, no matter how many times someone will try to tell you that!!!), there more often is need for good bassoon microphone management in live situations. This I don't consider 'electric bassoon' but just acoustic bassoon in a place where that sound needs to be at a higher volume.

Here is a good list of condenser mics that I like in a price range I respect (above \$400) for LIVE performance. Some also work well for studio recording:

Rode NT1

Rode K2

AKG C414XLII

Audio-Technica AT4021

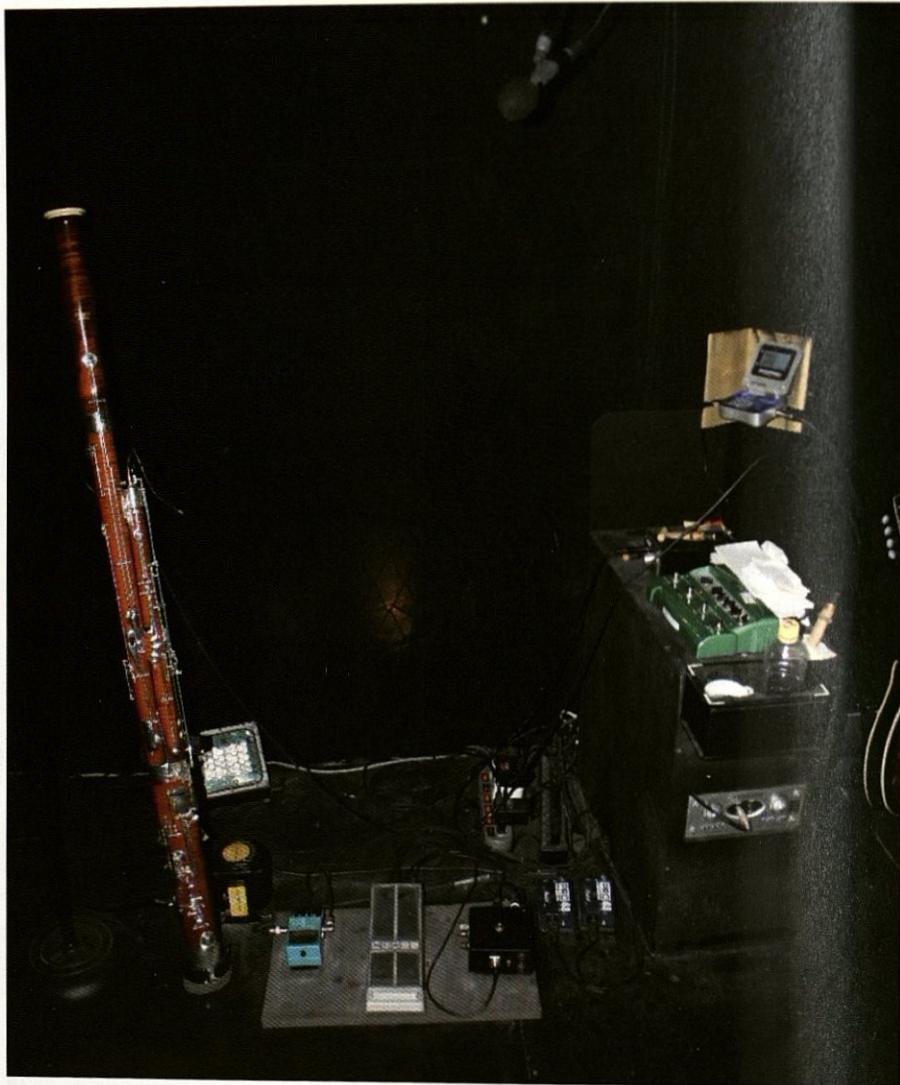
Earthworks M30 (better for recording as it's incredibly accurate)

Neumann KM184

B&K (very exotic but great in studio)

Any advice for people looking to become better acquainted with using electronics in their own music making? (Things to do/Things to NOT do, etc.)

- #1: Do go out of the ordinary and don't be afraid to step out and give it a shot. It's fun! Life is meant to be lived and experienced. Do something new—you might enjoy the bassoon more.
- #2: Don't forget the basics of bassoon playing in terms of tone and time.
- #3: Do remember that styles outside of western classical music have a methodology and a way of being done. There are many traditions, many different ways to phrase in different styles, and much to experience and learn everywhere.
- #4: Don't forget: when you are playing rhythmical music such as jazz, funk, trip-



Hanson's setup from his run with Cirque du Soleil's ZED

hop or whatever, the groove is king. Time, feel, groove, bounce—all of that is very important. You can do this as a bassoonist whether you are electric or not—start learning the styles before you even go electric. Feeling the groove and being one with it is essential to all groove-based music from any era.

#5: WATCH THE VOLUME. INVEST IN A VOLUME PEDAL to AFFECT your VOLUME PRESENCE to MATCH THOSE AROUND YOU. Once you can play loud as an electric guitar—I know—it's tempting to just rock out. But the bassoon is really not a very dynamic instrument in terms of the difference between pianissimo and fortissimo. Not like all the other instruments you would be playing with in an electric music setting. All those keyboardists and guitarists, they have volume knobs to turn it all down when the music calls for less volume. The louder it gets, the less dynamics you have with the bassoon. What guitarists and keyboardists do (to some degree) is turn their volume down here and there when they want to play much, much softer. With a bassoon on a pickup trans-

ducer, it's much harder to 'back off' from the sound source. The amplified difference between your forte and your piano when you play at a louder amplified concert is not much at all. There'll be times where you should be playing with a volume pedal at half depth (pressed half the way down). Think of it as backing off from the sound source.

- #6: If you are really interested, do try the Little-Jake pickup and don't be afraid to take a bocal to www.forrestsmusic.com where they can drill a hole and install a mount for your pickup. Again, it does nothing to the sound of your bocal when you go back to playing acoustic—you just cover the hole with the silver covering and you're back to playing acoustic.
- #7: Along those lines, if you play through a crappy bocal playing with an electric bassoon pickup, don't expect the bocal to sound all of a sudden GREAT for electric playing. A great bocal acoustic is a great bocal electric.
- #8: If you go with the pickup system, make sure to find a way to not step on your pickup cable and rip it out of your bocal! I have a system that loops the cable and screws it to the bell joint.

Contact:

www.paulhansonmusic.com
www.paulhansonmusic.net



What is your current job?

Principal Bassoon, National Symphony of México

How do electronics intersect with your career?

With my solo and chamber music. More and more pieces are being written for me that include electronics.

What sparked your interest in using electronics in music?

I'm just always pushing boundaries.

What is your favorite (or the most important) piece that includes bassoon and electronics?

If I can have two, *De tus manos brotan pájaros* by Javier Alvarez and *Plegarias* by Mario Lavista.

How has working with electronics impacted your "regular" bassoon playing?

Anything that forces us out of the box causes us to grow. Multiphonics were a huge stretch for me when I started learning "extended technique" and now what I have learned increases my technique in all aspects of my bassoon performance. The same can be said for electronics and now live electronics for me—it pushes me to grow as a musician.

What is your preferred setup (brands/models of mic, amp, etc.)?

I depend a lot on the concert venues for mikes and amplification but I always travel with my Macbook Pro and my MBOX2 by Digidesigns Interphase.

Any advice for people looking to become better acquainted with using electronics in their own music making? (Things to do/Things to NOT do, etc.)

Always plan on something going wrong in concert and especially in live electronics. Be prepared to check and re check and then always have back up.

Contact:

www.mexicocitywoodwindquintet.com



TRENT JACOBS

What is your current job?

Bassoon specialist at Midwest Musical Imports

How do electronics intersect with your career?

My only performing right now is with a jazz-fusion quartet in Minneapolis called Art For Hunting. The other instruments are either amplified or otherwise very loud (drums) and the style lends itself to non-traditional wind instrument sounds like the raw amplified bassoon and bassoon with various effects. I also have started playing EWI (Electronic Wind Instrument, my one of choice is the Yamaha WX5 controlling a Dave Smith Instruments MoPho synthesizer) in that band.

What sparked your interest in using electronics in music?

In high school and college I played a great deal of electric guitar. I never got too into what kinds of gear I used, but I had some around. I was introduced to the concept of electrified bassoon somewhere in the early 2000's but only decided to try it out in 2005 or so. I borrowed a Telex pickup and an adapted bocal from Mark Ortwein and afterwards decided to get my own. I wanted to expand what I was doing with bassoon beyond the standard rep and orchestral playing, and jazz related genres seemed like an appropriate direction to turn. I had been a big fan of electric guitarists like Joe Satriani and Steve Vai since high school, and that also influenced the musical direction I took with the electric bassoon.

What is your favorite (or the most important) piece that includes bassoon and electronics?

Favorite: The title track to Paul Hanson's album "Frolic in the Land of Plenty." The entire track save for some drum samples is made of effected bassoon, twisted around, sampled, and spliced beyond recognition. Using very modern studio tricks he creates an entire "band" all of his own bassoon sounds. It's almost not "bassoon and electronics" anymore, it's more like "bassoon and studio engineer."

How has working with electronics impacted your "regular" bassoon playing?

I know my concept of tone color and projection changes dramatically when I'm using the

pickup and amp, and I'm sure that in some way that's bled into my acoustic sound. I keep Bach on my music stand to keep me centered, though.

What is your preferred setup (brands/models of mic, amp, etc.)?

I use the pickup I developed (The Little-Jake) into an L.R. Baggs preamp. I have two pedalboards set up with different effects depending on the gig I'm going to. One pedalboard is set up for specific sounds for specific songs with my band, and it's got the most options on it because it's built around a particular multi-effects unit. The other board is made of individual effects "stomp boxes" that I can tweak more easily on the spot if I'm playing in a more flexible venue (like with the new improvising ensemble in Minneapolis called The Cherry Spoon Collective). I use an AER Compact 60/3 acoustic guitar amp, although I've used some Fender amps in the past.

Any advice for people looking to become better acquainted with using electronics in their own music making? (Things to do/Things to NOT do, etc.)

There are a lot of resources out there dedicated to electric guitarists and their use of amps and effects. Many of them are very useful in getting to know what various effects do to the sound of an instrument, and how to properly employ them. Guitar forums and product reviews and demos on YouTube can be really informative. You have to be careful though, as this stuff was not created with a bassoon in mind, and some things that sound great with electric guitar sound bad, or are uncontrollable, or just don't work right, with bassoon. I've found many classically trained wind players to be a bit resistant about what I do, but I always get positive reactions from guitar players, drummers, or whatever, when I get my bassoon out in a jam session, so don't be afraid to take your bassoon and pickup to your local guitar shop to test-drive some things. Nothing turns heads in a guitar store like running a bassoon into a Marshall full-stack.

Contact:

trentjacobs.wordpress.com

www.artforhunting.com

tjbassoon@gmail.com



What is your current job?

Professional bassoonist specializing in contemporary music and improvisation

How do electronics intersect with your career?

I regularly perform and commission new music that utilizes electronics in solo performance as well as chamber music settings. I perform music with fixed electronics (playback) as well as interactive electronics. I occasionally use microphones for amplification or to add to the timbre of the electronic sound.

What sparked your interest in using electronics in music?

Seeing other instrumentalists, especially other woodwind players, working with electronics intrigued me. Electronic music is a form of contemporary music, and the more I began playing contemporary music, electronics became a natural thing to do.

What is your favorite (or the most important) piece that includes bassoon and electronics?

It's hard to say whether there is a "most important piece" that includes bassoon and electronics. My personal favorite piece to play is Terry Riley's Dorian Reeds, originally written for soprano saxophone and delay. I made the bassoon arrangement of this piece several years ago and really enjoy it.

How has working with electronics impacted your "regular" bassoon playing?

Working with electronics has become more and more part of my "regular" bassoon playing. Now it is not unusual for me to play many concerts in a row that all somehow involve electronics.

What is your preferred setup (brands/models of mic, amp, etc.)?

I prefer to use the AMT (applied microphone technology) setup. The microphone is placed at the base of the long joint so that the mic itself is curved up by the left hand's front tone holes (finger side, not the thumb). A second microphone can be used, but isn't always essential, at the bell. The AMT mics don't distort the quality of the bassoon sound, which is why I prefer to use them. I run my sound through a speaker system, as opposed to an amp. Most of my electronics are generated through the computer so I use a MOTU audio interface.

Any advice for people looking to become better acquainted with using electronics in their own music making? (Things to do/Things to NOT do, etc.)

Listen to electroacoustic music! Find people who are playing music with electronics (on any instrument) and go see them perform. Ask them questions about their set up after their concert. Talk with bassoonists about their electronic setup, and try out gear first to see what fits you.

Contact:

www.danajessen.com
danajessen@gmail.com



JEFFREY LYMAN

What is your current job?

Associate Professor of Bassoon, University of Michigan School of Music, Theatre & Dance

How do electronics intersect with your career?

I use electronics relatively often, due in large part to my interest in electroacoustic for the bassoon and due to the same curiosity on the part of my students. That said, I am still surprised by two trends in my search: 1) the lack of a large body of electroacoustic music for

bassoon despite nearly a half century of composition in the genre, and 2), that with each find, due to the evolving nature of electroacoustic composition and its accompanying software and hardware, inevitably I have to purchase new equipment or learn new technical requirements for nearly every piece by every composer. Even after thirty years of collecting electroacoustic music, the fact is that just as one software or hardware item is mastered for any piece, the next piece comes along requiring a new gadget, a new kind of software, etc. I believe I have more "obsolete" electroacoustic music in my library than music I can easily play with current technologies.

What sparked your interest in using electronics in music?

Being alive in the 20th and 21st centuries sparked my interest. It makes no sense to me that in 2012 we still *have* to ask questions about amplification of the bassoon. Why is it that professional musicians playing woodwind instruments still can't easily and cheaply amplify their sound? We have a misplaced respect for the "beauty of the bassoon's natural sound" and therefore think that any alteration of that basic acoustic is somehow going to distort what we do or (in the case of amplification for non-electronic works) be seen as an admission of some kind of inadequacy on our part. The decibel range of our instrument is tiny in comparison with most other instruments, and there should be no second thought about amplifying our sound if the situation calls for it.

What is your favorite (or the most important) piece that includes bassoon and electronics?

I don't have one. I'm still waiting to hear or play an electroacoustic piece for bassoon that actually moves me instead of simply attracting my attention for a brief moment. I am able to describe some works as "cool" or fun, others as interesting and challenging, but I still look forward to that piece that I can return to time and again for its musical attributes rather than it being simply an example of a genre.

How has working with electronics impacted your "regular" bassoon playing?

I consider working with electronics the same as working with any other instrument or sound source, and I expect the same of "electronic" composers as I do of "acoustic" composers. That is, I believe the music is good if it is communicative in some way. I look for great phrases in electronic music the way I do in acoustic music, and unfortunately, I rarely find such phrases. I believe that too often our electronic repertoire still focuses on the creation of interesting sounds rather than the organization of said sounds. I wish composers who were fluent in electronic music were equally fluent in working with acoustic instruments and vice versa, and that any composer using any instrument or sound source would do so to create interesting music, not "acoustic" music and not "electroacoustic" music. Sound is sound, but labels and old-fashioned distinctions among musical styles and genres seem to affect how we listen, how we create, etc. I wish I could work with a composer so comfortable with electronic and acoustic composition that the label "electroacoustic" could go away.

What is your preferred setup (brands/models of mic, amp, etc.)?

For simple amplification without further electronic alteration or processing, I use two lavalier microphones. One I attach to my jacket or shirt, and this microphone catches the bassoon sound reflected off my torso. The other I attach to the bell of the bassoon, usually with a rubber band. This picks up the long joint notes that are not reflected by my upper body. For sound that needs to be processed, I use a contact microphone attached directly to a bocal that I use only for this purpose.

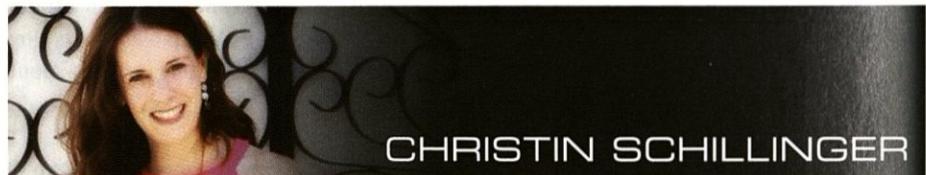
Any advice for people looking to become better acquainted with using electronics in their own music making? (Things to do/Things to NOT do, etc.)

Don't ask other woodwind musicians about electronic equipment: instead, talk directly with the "tech" people who work with jazz and rock musicians, or who work with singers and instrumentalists who amplify their music as a matter of course. I wouldn't ask an accountant about plumbing, so for advice on electronics I go to electronic specialists. As for guidance with performance software, find a student or faculty member in the nearest performing arts technology department to advise you and do what they say. In a week or two, ask them what has changed and subscribe to all updates.

Contact:

www-personal.umich.edu/~jlym

jlym@umich.edu



CHRISTIN SCHILLINGER

What is your current job?

Assistant Professor, Bassoon, Miami University, Ohio

How do electronics intersect with your career?

Electronics intersect with my career most prominently in pedagogy. I use electronics on a daily basis in the studio with all levels of instruction. This includes Tablet Video Recorders, Zoom Recorders, Decibel Readers, Sound Wave Readers (GarageBand/Audacity), SoundCloud, and Varying Smart Phone Apps.

What sparked your interest in using electronics in music?

This current generation of students came of age in a digital society. Whereas pedagogues can recall typing classes, DOS, and a pre-cell phone society, these students arrive in the studio fluent in cutting-edge technologies and able to modify their abilities within the technology as it continues to rapidly change.

The contextual background a student presents provides me with ample material to create the most effective, personalized plan of study. This generation is raised to receive and transmit information via electronics so I continue to explore every possible medium with which to make this possible and effective.

What is your favorite (or the most important) piece that includes bassoon and electronics?

Pedagogic: Michael Burns' *Swamp Song for Bassoon/Tape*

This piece remains one of the most aurally accessible works to a young student. In addition, it is not difficult to coordinate with the included "tape." The combination creates an excellent entry work into the world of Bassoon/Electronics as a genre.

Pedagogic: Alex Shapiro's *Deep for Contrabassoon/Tape*

Similar to Burns' work, Shapiro's Deep is also aurally accessible and not terribly difficult to coordinate. Many students seeking a substantial contrabassoon solo may seek out this work

as it also introduces them to the electronics medium.

Performance: Improvisation with Live Composer

Personally, I prefer the freedom of live improvisation. The change of electronic music over the last fifty years is drastic. Now, the composer can become an active collaborator and live musician. Armed with a laptop, the composer has the opportunity to interact and react to the sounds I create live. (Though this does require in many instances a receptive audience.)

How has working with electronics impacted your "regular" bassoon playing?

The ability to microscopically dissect my playing from every angle has changed not only my playing, but also my concept of playing. We take much for granted until for instance we see embouchure tension on an iPad video. Similar digital technologies are greatly needed in reed making.

What is your preferred setup (brands/models of mic, amp, etc.)?

I prefer to work with professionals and the up-to-date equipment they have to offer. No kidding. Technology, especially with regard to the recording industry, changes so rapidly, that to hold to 'what I used last time' would hold me back. For my two solo recordings I worked closely with David Bowles of Swineshead Productions.

Any advice for people looking to become better acquainted with using electronics in their own music making? (Things to do/Things to NOT do, etc.)

DO:

1. Talk to the Music Technology/Electronic Music Composer at your local university. They are excited to meet musicians interested in their medium. If they cannot work directly with you, they often will put you in touch with people who can.
2. Start simple. A work with a pre-recorded electronic accompaniment is a great entrance into this world. It is VERY different...and you won't know till you try!
3. Take a risk! What have you got to lose?

DON'T:

1. Be afraid.

Contact:

www.schillingerbassoon.com

schillcm@miamioh.edu



What is your current job?

Freelance bassoonist/composer/teacher; DMA candidate at Northwestern University

How do electronics intersect with your career?

Electronics are integral to the music I make, both as a composer and as a bassoonist/im-



A selection of Young's favorite equipment

proviser. Over the last eight years or so, I have developed a personal system of pedals and amplification that has helped me develop and refine an idiosyncratic approach to improvising with the bassoon. And although I started out mostly working with amplification and the bassoon, I am now working with other amplified instruments in compositions and integrating sampled electronics into pieces, including new solo pieces for myself for amplified bassoon with pedals and sampled electronics.

What sparked your interest in using electronics in music?

Initially my goal was to control my volume in order to be heard because I was performing in noisier settings. When I started playing with louder bands, being able to raise my volume and control my amplified sound was important. Once I had a basic amplification and pedal setup going, however, my interest turned to bringing out really quiet sounds and the internal resonances of the bassoon.

What is your favorite (or the most important) piece that includes bassoon and electronics?
I don't have a favorite piece or one that I think is the most important, but I tend to be more often inspired by music outside of the bassoon repertoire.

How has working with electronics impacted your "regular" bassoon playing?

Using amplification and subtle electronics (such as EQ and reverb) has allowed me to really explore the very quiet end of extended techniques for the bassoon. With the palette of extended techniques that I use as an improviser and composer, amplification has, perhaps counterintuitively, really expanded my palette on the softer end of the spectrum.

What is your preferred setup (brands/models of mic, amp, etc.)?

I use the Telex pickup. I bought one already installed on a Fox bocal right when they be-

came available, and it still works great! It has a really even sound across the whole instrument. I doesn't sound like an acoustic bassoon, which is fine, since I also work with pedals. My current pedals include: a Boss Equalizer, a Electro-Harmonix reverb unit, a Boss SuperOctave, a DigiTech Whammy, and an Ernie Ball volume pedal.

Any advice for people looking to become better acquainted with using electronics in their own music making? (Things to do/Things to NOT do, etc.)

The best advice I can have is to have a musical goal in mind—even if it is as seemingly simple as “to be louder”—and then to be open to experimenting with the unforeseen potentials of your new tools. I also tend to add one piece of equipment at a time, in order to understand as much as possible what it can do before adding something else. What’s exciting, though, are the happy accidents and unexpected discoveries. This is true with acoustic playing, too, I think, but electronics can be an exciting way to open your ears to new sounds!

Contact:

www.katherineyoung.info

katherine.a.young@gmail.com

Listen to an intense track by Katherine’s group Pretty Monsters at

www.youtube.com/watch?v=8zp4cZapoEM