

# **Jason Thorpe Buchanan**

Composer & Multimedia/Sound Artist

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Portfolio of select works

Artistic Director, the [Switch~ Ensemble]

Artistic Associate/Lecturer, Hybrid Music Lab  
Hochschule für Musik Carl Maria von Weber Dresden

# Ecology of Disruption (2024)

three performers, feedback instruments, sensors, generative electronics, and video  
 Commissioned by Tetractys New Music's 2024 "Here Be Monsters" Festival – 15 minutes  
 Premiered May 26, 2024, Austin, Texas  
 Video forthcoming: [www.jasonthorpebuchanan.com](http://www.jasonthorpebuchanan.com)

Score: <https://bit.ly/3Xciodd>

**Ecology of Disruption** for Line Upon Line Percussion was composed in April of 2024 and premiered in late May. A trio for three performers with generative audio and gesturally reactive systems for DSP and live video processing, three custom-built feedback instruments made from metal brackets, springs, and guitar pickups drive a feedback system in software, each output to transducers via volume pedals which the performers operate and control. Hand-worn sensors trigger reservoirs of audio and video samples, in conjunction with the control of various parameters for audiovisual processing and projection. The work further utilizes footage from across the globe of events and political situations which have been recontextualized by technology, such as government-sanctioned killings in Iran, the Russian invasion of Ukraine, occupation and brutality against civilians in Gaza, continued violence and fascism in the post-Trump era, and unending patterns of negligence and greed by corporate and political leaders with regard to the global climate crisis.

**E** ( $\text{♩} = 63$ )  
 1. **SOLO**: ad libitum  
 2. **AD LIBITUM**  
 3. **CONT'D AD LIBITUM**  
 4. **SOLO**: ad libitum  
 5. **AD LIBITUM**  
 6. **CONT'D AD LIBITUM**



**F** ( $\text{♩} = 60$ )  
 1. **SOLO**: ad libitum  
 2. **AD LIBITUM**  
 3. **CONT'D AD LIBITUM**  
 4. **SOLO**: ad libitum  
 5. **AD LIBITUM**  
 6. **CONT'D AD LIBITUM**



# Emergent Phenomena (2023)

alto saxophone, bass trombone, electric guitar, and generative electronics

Commissioned by IntAct Festival, 2023 – 31 minutes

Premiered December 24, 2023, Bangkok, Thailand

Video: <https://vimeo.com/911123291>

Score: <https://bit.ly/3StaV5H>

**Emergent Phenomena** for the TACETi Ensemble was composed in November of 2023, following the development of a sophisticated system for real-time structural analysis of live microphone inputs. A trio for alto saxophone, trombone, and electric guitar, the electronics are entirely generative, using a self-training machine learning system. A clustering algorithm alongside an index of data from rapid analysis searches for temporal points of spectral self-similarity across all three microphone inputs. When patterns in harmonic spectra, amplitude, and other musical parameters are recognized, the system gradually learns from what it hears and classifies these sonorities to create a temporal map of musical ‘objects’ in the work. This perpetually growing store of data is used to respond to the musicians accordingly with generative material. Four layers of generative electronics take place: Each “novel” sound that the computer perceives is immediately recorded into a series of perpetually recording buffers, which are categorized and written to disk. When the computer perceives a match between past and present, it retrieves the samples written at each point in the past to perform a variety of manipulations, based upon what is heard in the present moment.

The musical score consists of two pages of dense, handwritten-style notation. The top page includes parts for Alto Saxophone (A. Sx.), Bass Trombone (Tbn.), Electric Guitar (E-Gtr.), and Generative Electronics (Elect.). The bottom page continues with the same instrumentation. Both pages feature multiple staves per instrument, with various musical markings such as dynamics (e.g., f, ff, mp), articulations, and performance instructions. The notation is highly detailed, reflecting the complexity of the generative electronic system described in the text.



Based on the amount of time that has elapsed since the matching sample was taken, how many times it has occurred, and the spectral and musical characteristics of each “object”, the computer will combine discrete pre-recorded samples to generate a composite sound in response. Each of the three microphone signals are processed according to perceived patterns and sonic data, such as amplitude, density of musical activity, or frequency spectra. Lastly, a variety of other processes are performed both on the input from the musicians, and from the sounds generated by the system itself. In each moment, this may result in new material similar to what is performed by the musicians, or new material in stark contrast to what it perceives, a dynamic, mercurial system which is learning and changing with each passing moment.

This work was conceptualized while recovering from an injury in the Summer of 2023 outside of Berlin. Inspired by the lasting neurological effects this injury had on my body, which was contorting itself to protect my spine from further injury, I was struck by the behavior of my own human body as a complex system that in fact, I had little control over. Correspondingly, I felt renewed interest in developing new systems of interactivity between human musicians and machines. My goal was to create a work that does not rely on temporal synchronicity between electronics and the musicians, such as a click track or precise soundfile triggering, nor sensors and gestural tracking, but rather a system which truly responds to the spontaneous and nuanced details of the musical material itself, and the ways in which these sounds unfold over time to create complex networks.

*“The emergence of life and intelligence from less-alive and less-intelligent components has happened at least once. Emergent behavior is that which cannot be predicted through analysis at any level simpler than that of the system as a whole... Emergent behavior, by definition, is what’s left after everything else has been explained.” — George Dyson*

# Reflexive Iterations 1.a (2020)

alto sax, bass clarinet, percussion, violin, cello, and extended “no-input” mixer

Commissioned by TACETi Ensemble, 2020 Thailand New Music and Arts Symposium, Bangkok – Premiered December 20, 2020

Video: <https://vimeo.com/560740537>

Score: <https://bit.ly/3yt8NyL>



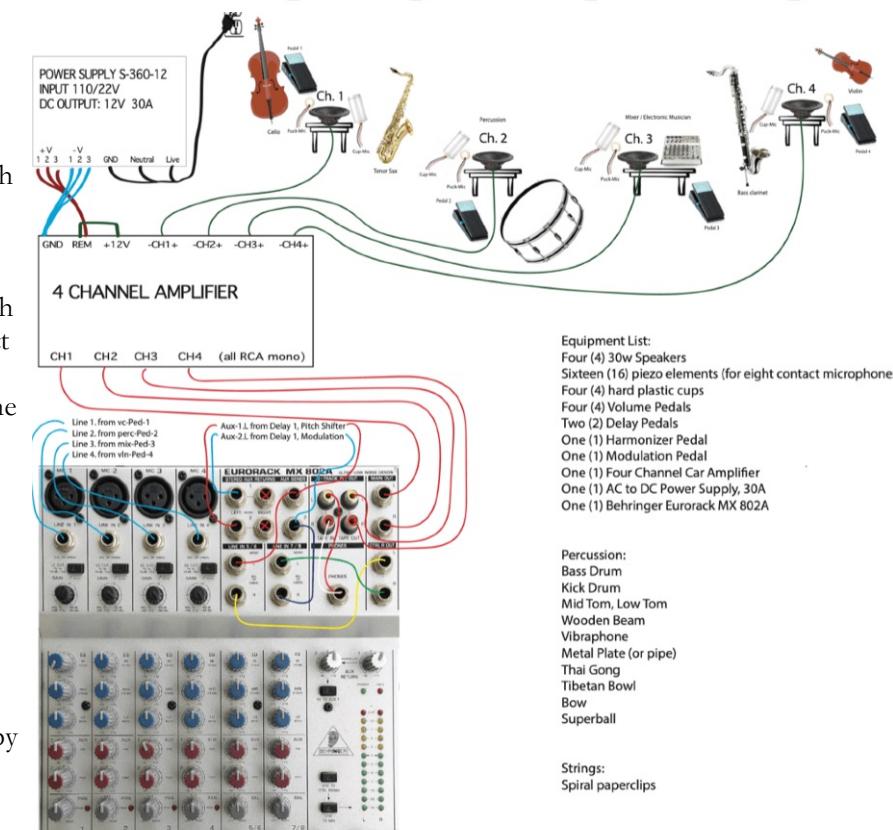
**Reflexive Iterations 1.a** was written for the TACETi Ensemble to be premiered during the 2020 Thailand New Music and Art Symposium. The work expands upon the “no-input” mixing tradition in noise music, routing input from various contact microphones through an analog system with which the performers control signal flow through both physical proximity and electrical attenuation. The mixer/composer manipulates these signals through gain staging, attenuation, and bandpass filters which change the power of different frequency components within the audio spectrum. These are then routed through auxiliary sends to two systems of effect pedals, back into the mixer and a 4-channel car amplifier, and finally out to four discrete speakers. Each speaker emits air pressure waves, which are both perceived by the audience and musicians, as well as fed back through the system again via the same contact microphones which first converted the sound into electrical signals. In other words, they “hear” themselves. The physical behavior of the musicians on stage influence the character and quality of this recursive process based on the position and proximity of the microphones to the speakers, “tuning” and also introducing new, physical noise by touching the microphone or plastic filter against the vibrating speaker cone itself.

In some way this work is in response to the events of 2020 and designed as an antidote to life on the internet. A desire to construct a system dealing with corporeal attributes of physical space—air, sound, bodies—in a way that would not be possible with a digital system. This participatory network requires the musicians to interact with and dynamically engage the signals themselves, exploring the transmission of invisible waves traveling through a real-world space with their own physical gestures. The precise result is unknown to the performers prior to performance—subject to a staggering number of variables—as they iteratively interpret suggested physical actions while reflexively responding in real-time to the ramifications of these actions in an attempt to control a thing that, by its very nature, is precarious and mercurial.

Transposed Full Score  
v12.16.20 - sketch

Reflexive Iterations 1.a  
for the TACETi Ensemble

Jason Thorpe Buchanan  
December 16, 2020



Equipment List:  
 Four (4) 30w Speakers  
 Sixteen (16) piezo elements (for eight contact microphones)  
 Four (4) hard plastic cups  
 Four (4) Volume Pedals  
 Two (2) Delay Pedals  
 One (1) Harmonizer Pedal  
 One (1) Modulation Pedal  
 One (1) Four Channel Car Amplifier  
 One (1) AC to DC Power Supply, 30A  
 One (1) Behringer Eurorack MX 802A

Percussion:  
 Bass Drum  
 Kick Drum  
 Mid Tom, Low Tom  
 Wooden Beam  
 Vibraphone  
 Metal Plate (or pipe)  
 Thai Gong  
 Tibetan Bowl  
 Bow  
 Superball

Strings:  
 Spiral paperclips

# all-forgetting-is-retrieval (2019)

alto sax, bass clarinet, bass trombone, electric guitar, percussion, violin, cello, augmented conductor and electronics

Commissioned by TACETi Ensemble, 2019 Thailand New Music and Arts Symposium, Bangkok – Premiered July 7, 2019

Video: <https://vimeo.com/386270819>

Score: <https://bitly/2kcTfyZ>



*all-forgetting-is-retrieval* explores the formation of human memory, retrieval, and failure, drawing from two sources. “Myth of Permanent Memory” from Richard A. Chechile’s book *Analyzing Memory: The Formation, Retention, and Measurement of Memory*: “There is a common belief that forgetting is strictly due to a retrieval failure. It is curious why this idea of a permanent memory is so appealing...the storage of information is not perfect. Storage as well as retrieval is subject to failure. Thus, the hypothesis that **all-forgetting-is-retrieval** is incorrect. For information in this state of permanent [long-term] memory, all subsequent forgetting is assumed to be caused by a retrieval failure. Yet...there is no known biological mechanism to stop the adaptive changes in memory from continuing and thereby possibly destroying the prior learning record. If the learning environment changes, the same adaptive mechanisms that created the memory in the first place will continue to rearrange the structure of memory and potentially destroy the former memory representation.” Dialogue from the 1978 ephemeral film *Human Memory* is used as sonic material for the electronics, written for eight musicians including a conductor augmented by wearable electronics to trigger and govern the behavior of temporal events and media, manipulated through gestural tracking mapped onto discrete musical parameters. The title is both perplexing and quickly disproven in the above passage, reflecting the strange and unfamiliar space that, for me, the piece inhabits with “failures” both large and small. My apprehension toward falling into familiar patterns and relying on my past compositional work shares a similar cognitive and emotional space as “lost” experiences—the inability to be truly present in a moment, or failure to commit to memory experiences that are simultaneously both formative and fleeting. The rapid loss of their fidelity is staggering, and this work attempts to confront that impermanence and decay. To reflect this, I was interested in both paraphrasing and sampling elements of my past work, alongside the recontextualization of “found” media and sonic material deeply familiar to me. How can we be certain of things we have experienced, and what if the events that took place were, in fact, radically different than we remember? These inaccuracies and discrepancies that form over time through internal repetition, how information storage and retrieval may be influenced by context, and what kind of experience might interrupt a memory from being formed, are explored. “The subject of our film is memory. Imagine what your mental life would be like if you had no memory at all.”

Transposed Full Score  
v.07.02.19 - first draft

for the TACETi Ensemble

Jason Thorpe Buchanan  
July 2 2019



# surface, tension (2018)

two performers and video processing environment

Commissioned by Embassy of Foreign Artists, Geneva, Switzerland – Premiered May 24, 2018

Video: <https://vimeo.com/306876693>



**surface, tension** for two performers, electronics, and live video processing is the third installment in a cycle of works for ensemble and immersive processing environment. During the performance, reservoirs of media files are created, retrieved, re-organized, and composited against one another, creating temporal, aural, and visual dissonances between past and present actions—events unfolding on stage and in media generated in real-time. The commingling of fluctuating chronologies creates temporal instability, challenges the mutability of memory, and proposes an alternative, speculative engagement with bodily-lived time. This performance-installation is a departure point for a more dynamic and open musical situation. A system in which discrete physical gestures of performers govern the behavior of audio and video processing through wearable technology, sensors, and motion tracking, responding directly to physical actions, with increased emphasis on causality and perceivable correlations between processes. Cameras capture video of the performers, who are facing the audience but obscured by a large, suspended paper screen. In one hand, each performer wields a contact microphone contained within plastic cup that serves as a resonator. In the other, a sensor traces the coordinates of their arm's gestures, the values of which are mapped to visual and aural parameters that change over the course of the performance, controlling the processing of incoming audio and video signals in various ways. This processed audio is sent to two exciters, placed in each corner of the paper screen, transforming it into a large electroacoustic transducer. Against this surface, the microphones create a feedback loop, filtered and manipulated by both the position of the cup and the position of the sensor in the opposing hand. Similarly, the cameras behind the screen act as an inverted mirror, doubling and refracting the images that are captured. The further development of this system in-progress, for me, represents the potential to heighten expressive potency and achieve meaningful, seamless integration of technology into the fabric of a new and powerful cycle of works.





surface, tension – Installation Performance, Lecture, & Audience Participation, Geneva, Switzerland  
Alexandra Bellon & Anne Briset, percussion – Jason Thorpe Buchanan, electronics & video

# ACTOR-NETWORK THEORY (2017)

soprano, bass flute, bass clarinet, percussion, harp, piano, violin, viola, cello, and electronics

Commissioned by Royaumont Académie Voix Nouvelles Ensemble – Premiered September 8, 2017

Video: <https://vimeo.com/306331445/7a2d08d6e9>

Score: <https://bit.ly/2xR4zW6>



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**ACTOR-NETWORK THEORY** was commissioned by the Fondation Royaumont and composed between April and August of 2017 for the Royaumont Académie Voix Nouvelles Ensemble's instrumentation of soprano and mixed ensemble, with electronics. The work is structured around two pages of text, culled from over 18,000 words generated by the DadaDodo engine, a class of program known as "dissociators" that "analyses texts for word probabilities, generating random sentences based on that." The result is sometimes nonsensical, but often reveals intriguing alternative meanings or associations. These fragments were then composed into a linear blueprint, using the resulting speech patterns as a temporal framework. ANT was developed by Latour and others as an analytical tool to map and attempt to explain relationships and interactions between human and non-human 'actors', exploring how material-semiotic networks are formed, hold together, or fall apart. These networks are precarious, in that the exchange between nodes must be repeatedly 'performed' or the network will dissolve. In some ways, the transhumanist movement embodies ANT, which suggests that all nodes within a social network are 'actors', whether human or machine — a boundary that is increasingly blurred. Mutual interaction between these nodes creates a feedback loop, in which the technology we have developed begins to influence and change the human 'actors' participating in this system. Developments in technology and digital communication increasingly influence not only our relationships with one another, but our behavior as individuals and our interaction with the world. We are forced to consider to what degree we allow technology to mediate our presence with other humans, fundamentally challenging the ways in which we think about consciousness and our identity as human beings. As stated by Benjamin Pieckut: "Networks are never *simply* language, never *simply* sound, never *simply* personal contacts, never *simply* practices and institutions, but rather a messy mix of all types of things".

# PANIC ARCHITECTURE (2017)

Sinfonietta (1.1.1.1-1.1.1.0-1.1.1.1 – 2 Perc, harp, piano) and electronics

Commissioned by the Earle Brown Music Foundation for the Time Spans Festival

Premiered by the Talea Ensemble with conductor Jeffrey Means

DiMenna Center, NYC - August 2, 2017

Video: <https://vimeo.com/245320082> Score: <https://bit.ly/2yzGr7q>

The score consists of 18 pages of musical notation. It features parts for Bassoon (B. Fl.), Oboe (Ob.), Bass Clarinet (B. Cl.), Bassoon (C. Bsn.), Horn (Hn.), C. Tpt., Trombone (Tbn.), Percussion I (Perc. I), Percussion II (Perc. II), Harp (Hrp.), Piano (Pno.), Violin I (Vln. I), Violin II (Vln. II), Viola (Vla.), and Double Bass (D.B.). The score is filled with dense musical notation, including many rests and unique performance techniques. Key sections include 'absolute multiphonics ad libitum change each time', 'slap tongue', and various time signature changes (3/4, 5/4, 10/5, 4/2). The title 'PANIC ARCHITECTURE' appears in large letters on the right side of the first page.



## PSYCHASTHENIA B: PANIC ARCHITECTURE

*Psychastenia* is defined as “a group of neuroses characterized by phobias, obsessions, compulsions, or excessive anxiety”, imagining a new cycle of works for ensemble and various immersive media environments. During the performance of each work in the cycle, reservoirs of media files are created, retrieved, re-organized, and composited against one another, creating temporal, aural, or visual dissonances between past and present actions – events unfolding on stage and in media generated in real-time. The commingling of fluctuating chronologies creates temporal instability, challenges the mutability of memory, and proposes an alternative, speculative engagement with bodily-lived time. The psychasthenic possesses insufficient control over conscious thinking or memory, wandering aimlessly or forgetting the task at hand. Their thoughts are scattered, necessitating significant effort in order to organize them or communicate with others, frequently accompanied by characteristic insomnia that induces fatigue. *Panic Architecture* describes a participatory framework demanding compulsive interaction and attention. The relentless influx of email, messages, and notifications compel our constant engagement and response – we have assimilated dependency on these means of communication that now function as our tether to society and a primary mode of interpersonal contact. The act of checking one's email can throw consumers into a state of panic or suspension of breath, the term ‘email apnea’ coined to describe this unconscious reflex. Experiments in behaviorism and operant conditioning found that rats given rewards irregularly in response to minor daily tasks were compulsively driven to continue, in hopes of another reward. This behavior, termed ‘intermittent reinforcement’, is applicable to our modern social networks and digital platforms, enticing users to obsessively check for new content. Facebook and Twitter are most the potent and ubiquitous examples of systems that instill panic and path dependence. Families and friends ‘panic’ another other, affected by posts and status updates. These communications, particularly when attached to audible or haptic stimuli, are mechanisms of panic architecture that are designed to induce continual, obsessive actions paid on the consumer to click and update their user interface. Digital panic occurs when multiple, simultaneous systems intermittently reinforce a user’s attention. Digital connectivity, flow, and multitasking online sometimes lead to psychological states that resemble those of a psychasthenic, described as ‘continuous partial attention’, ‘simultaneous time’, or ‘ambient intimacy’. To enable cohesive, linear thoughts, one’s mind must piece together various fragments and memories being otherwise accessed concurrently. *PANIC ARCHITECTURE* was commissioned by the Earle Brown Music Foundation and TIME SPANS Festival, written for the Talea Ensemble and completed in 2017 of June, 17.

# soliloquios del viento (2016; rev. 2017)

six singers (s, ms, ct, t, bar, bs) and eight instrumentalists (b.fl, b.cl, t.sx, pno, perc, vln, vla, vc)  
 Commissioned by the Royaumont Académie Voix Nouvelles  
 Premiered by Talea Ensemble & EXAUDI – 09/09/2016, Asnières-sur-Oise, France  
 Sextet + Elec. Version premiered by Ensemble Interface, – 07/02/2017, Valencia, Spain

The musical score for *soliloquios del viento* consists of 14 pages of dense musical notation. It features six vocal parts (Soprano, Mezzo-Soprano, Counter-Tenor, Tenor, Bass-Baritone, and Bass) and eight instrumental parts (Bassoon, Bass Clarinet, Trombone, Piano, Percussion, Violin, Viola, and Cello). The score includes numerous dynamic markings such as *mp*, *pp*, *f*, and *p*, as well as performance instructions like *rit.*, *accel.*, and *slurs*. The vocal parts often sing in unison or in small groups, while the instruments provide harmonic and rhythmic support. The score is divided into sections by measure numbers (e.g., 3, 5, 8, 4, 8, 5, 8) and includes lyrics in Spanish. The piano part is particularly prominent, providing harmonic and melodic support throughout the piece.



*soliloquios del viento* was commissioned by Royaumont Académie Voix Nouvelles, written in August of 2016 and premiered by the Talea Ensemble & EXAUDI on September 9, 2016, conducted by James Baker. This fourteen-minute work is a meditation on eight poems of Pablo Neruda, reflecting love, distance, and despair. The six singers are set against eight instrumentalists whose fragile and often voiceless sonorities gently color and obscure the murmuring of the text and pointillistic vocal material. The Spanish text is predominantly obscured and unintelligible, with the themes of Neruda's words instead evoked by the ensemble composite. He writes of two lovers, their romance characterized by abrasion between two barbarous, solitary souls, who consume and destroy one another, intertwined yet divided between new life and inexorable chaos. Neruda's texts evoke not only the conflict between darkness and light in both persons, but through this lens, the experience of being confronted with the subjectivity of another's consciousness. That otherness is manifest in their traumatic, destructive passions, revealing a mutual incoherence and nascency beyond endurance. Each poem seems to represent discrete, or perhaps parallel, alternative scenarios – some in which they are each awoken by their confrontation instead of destroyed – in others suffering one another to the point of intolerable anguish and desolation. Eroticism, abrasion, despair, and desolation run throughout Neruda's evocative language, his lover depicted as an enemy with whom he pleads for voice – who has disgraced their love. For the poet, love is the sole means with which two people may “weather” one another. A source of both euphoria and utter despair, there is a vastness that is evoked in his texts, as if an attempt to span a great distance. Each braves the other, an intimacy and corrosive embrace that both breaks and absolves each person.

Score: <http://bit.ly/2fyzb49>

Audio Recording: <http://bit.ly/2fyBwfD>

Sextet version, Score (with electronics, 2017): <http://bit.ly/2LEJtDd>

Sextet version, Video Recording (with electronics, 2017): <https://vimeo.com/268371130>

Sextet version, Video Recording (with electronics, 2019): <https://vimeo.com/400224384>

## walkside, lost (2015)

percussion trio, electronics, and video processing  
Commissioned by Gaudeamus Muziekweek  
Video: <http://vimeo.com/140159929>  
Score: <http://bit.ly/2fFki3X>



## gimme shelter (2015)

percussion trio, electronics, and video processing  
Commissioned by Eklektro Percussion  
Video forthcoming: <http://bit.ly/2hFEBMS>  
Score: <http://bit.ly/2fGcqjB>



Slagwerk Den Haag, TivoliVredenburg, Utrecht, NL, Sep. 2015

**walkside, lost** and **gimme shelter** are two works in a cycle of compositions for three percussionists, electronics, and live video processing on texts by American poet Darcie Dennigan written specifically for these commissions, the first for Gaudeamus Muziekweek & Slagwerk Den Haag, the second for Eklektro Percussion Geneva. The pieces both revolve around the structural intersections of precisely notated gestures that influence human performance with software systems that influence behavior of multimedia, the obfuscation or recontextualization of semantic content in speech, and the way in which confusion and ambiguity distort a participant's perception. The systems I have designed for these works serve to generate reservoirs of video and audio in real-time that are recalled, manipulated, and re-composed against themselves during the live performance in numerous ways throughout the work. Variables for video compositing and audio processing are governed by precise automation of distinct parameters that control the behavior of the system, resulting in visual, aural, and temporal dissonances between multimedia and human performance. To emulate organic, unpredictable behavior, noise is introduced into the system so that these automation values become weighted/biased targets rather than fixed values. Further expansion and development of these software systems will allow the behavior of multimedia elements to be influenced by, and respond to, data parsed directly from the behavior and actions of live performers through the use of sensors, microphones, video data, and motion tracking for enhanced integration between the behavior of the software system and performers to create a dynamic performance environment. These developments will be utilized progressively with each new work in the cycle, a process that will eventually turn back on itself and be retroactively incorporated with each new performance of each work. – Jason Thorpe Buchanan

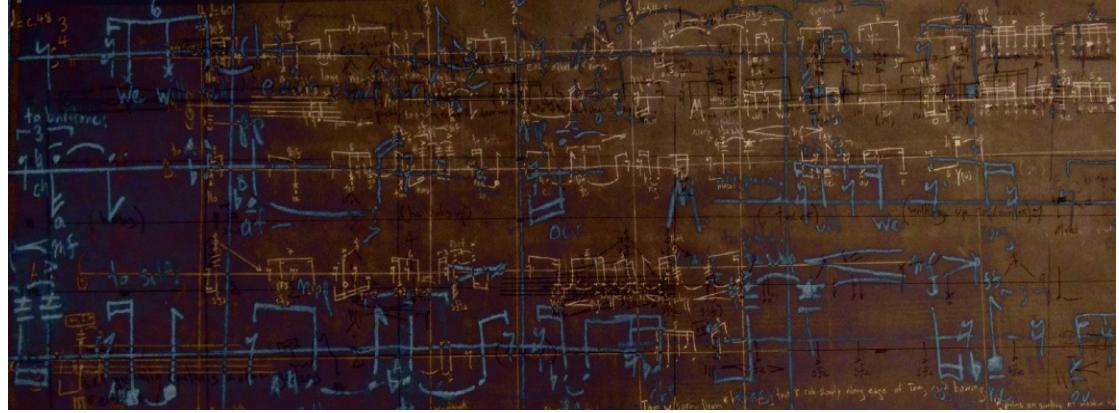
**walkside, lost:** Sidewalks are crucial for protests, commuting, parades, playing, and more, but increasingly in America, sidewalks are absent from urban planning. This piece enacts the absurdity of the current American political discourse on public space-- we're not even evolved enough to be at cross purposes. The best one can say is that we're at cross-talks.

**gimme shelter:** It was Halloween when the New York Times showcased their story of a German town and its 102 inhabitants "bracing" for their mandated embrace of 750 asylum seekers. Catastrophe visits the world's inhabitants unevenly, disproportionately, and then its victims, costumed in their catastrophe, must visit us. **gimme shelter** evokes three starkly contrasting sociopolitical viewpoints in a text written concurrent with the mass exodus of citizens of poor, war-ravaged, and environmentally unstable countries seeking home elsewhere. No single perspective or line is more important here than the other. Rather, consider the accretion of speech in overlapping entreaties alongside the stagnant drone of statistics and rhetoric. We are not free to listen to one side, to make one account readable, livable—hospitable. – Darcie Dennigan



# Hunger A Multimedia Opera in Four Parts (2014-)

three singers (s, s, bar), eight instrumentalists (a.fl, b.cl, b.sx, e.gtr, vln, vc, pno, perc),  
electronics, & real-time video processing  
Libretto by Darcie Dennigan, poet-in-residence, University of Connecticut



**Part III, Sc. 1:** Commissioned by the Internationales Musikinstitut Darmstadt Contemporary Opera Workshop – Ensemble Interface, Stephanie Aston, Barbara Kinga Majewska, Stephan Storck, Stefan Sreiber, Lydia Steier, Darmstadt, Germany, Aug. 2014

**Part III, Sc. 2:** Commissioned by The Industry's FIRST TAKE Opera Workshop, wildUp, Stephanie Aston, Laura Bohn, Andy Dwan, Marc Lowenstein, Yuval Sharon, Feb. 2015



Staged Premiere: the [Switch~ Ensemble], Sophia Burgos, Lucy Dhegrae, Jeff Gavett, Daniel Bassin, Jason Thorpe Buchanan, DiMenna Center, NYC, USA, May 2015

# Second Study for Alto Saxophone, Electronics, and Video: *pulp* (2015)

alto saxophone, electronics, and video processing

Commissioning Consortium, 2015 World Saxophone Congress

Video (excerpts): <https://vimeo.com/207523271>

Audio: <http://bit.ly/2xRE7LS>

Score: <http://bit.ly/2hDPm4y>



World Premiere: Matt Evans, World  
Saxophone Congress, Strasbourg, France, Jul. 2015

Sean Fredenburg, Portland State University,  
Portland, OR, May 2016

Pulp (1994) Dedicated to bad writing"/&gt;

**Second Study for Alto Saxophone, Electronics, and Video: *pulp*** (2015) was co-commissioned by Matt Evans, Casey Grev, Emily Jane Loboda, Sean Fredenburg, and Marta Tiesenga. The work was premiered at the World Saxophone Congress in Strasbourg, France on July 13, 2015 by Matt Evans, and is based on the life and work of American poet Charles Bukowski. The work utilizes source materials - audio and video footage - recorded throughout Bukowski's life, such as interviews, documentaries, and poetry readings. The work gradually developed from an initial commission proposal for a work with soprano voice, alto saxophone, and electronics, to instead constrain the soprano part within the boundaries of the electronics and video. The result is a collage made up of the superimposition of source materials, newly recorded video and audio using texts of Bukowski and emulation of saxophone recordings, and video capture that is processed and composited against each opposing stream of video in real-time during the performance. Upon returning from Germany in 2011, my first project was a commission from saxophonist Michael Rene Torres, resulting in the work *First Study for Alto Saxophone: doublethink*. At the time, a large harmonic blueprint was generated with material to be utilized as structural pillars in a cycle of additional works for saxophone. The aforementioned blueprint consists of pitch materials that are generated through two distinct serial matrices, each gradually 'bent' by a quarter-tone from the 1st to 12th position. A sequence of multiphonics were then chosen aurally and mapped onto these pillars - in such a way that an organic succession can be felt even through dense layers of material - before composing out the space between these points with material derived both from the two matrices, and from intuitively written material utilizing pitch content from the adjacent multiphonics. These microtonal pitch fields are inevitably perceived as a mass of sound or series of gestures rather than discrete pitch class sets, and although the layers are not heard individually but as a composite, the resulting networks interact with each other and influence the listener's experience in various ways. In *pulp*, I began at the precise point in the blueprint where I left off with *doublethink*; through both subtle and abrasive computer processes, the acoustic, electronic, and video elements fuse together to form a web of rich timbres and colors. In this work, harmonic relationships are both emphasized and obscured through the use of multiphonics, vocalizations, speech, and extended techniques and tremolos meant to disrupt and destabilize explicit pitch content. The physicality in performance and fragility inherent in production of these sounds is likely the most salient feature of the saxophone writing, and serve to complement the raw, abrasive, and often vulgar nature of Bukowski's life and work. – Jason Thorpe Buchanan

Additional performances:

Emily Loboda, Greensboro & Richmond, Apr. 2016

Casey Grev, East Lansing Mar. 2016, San Francisco, Mar. 2017

Matt Evans, Kent, OH, Sep. 2016

Jorge Sousa, Portugal, Feb. 2023

# Double Concerto for Two Horns & Chamber Orchestra (2014)

for Michael Walker, Jeff Nelsen, Brad Lubman, and the Eastman Musica Nova Ensemble

Sinfonietta: 1.1.2.1 - 4.1.1.0 - 3 Perc, Piano - 1.1.1.1.1

Meir Rimon Commissioning Assistance Program of the International Horn Society

Winner, 2015 ASCAP Morton Gould Award

Video: <http://vimeo.com/110432545> Score: <http://bit.ly/2fzdwZS>

**Double Concerto for Two Horns and Chamber Orchestra** was written between November 2013 and March 2014. In 2008, I had written Mike Walker a work for horn and electronics that I now consider a turning point in my creative output, and throughout my undergraduate studies he remained a close friend and colleague. The seed was planted for a horn concerto as far back as March 2011 through correspondence with Mike, and by June we had confirmed plans to collaborate. The following year Mike suggested that I write a double concerto for himself and Jeff Nelsen, an exciting prospect and opportunity to explore the musical relationship between two hornists. We discussed the use of a "fluid" early valve horn technique that would utilize the natural partials available on each of the instruments, following in the footsteps of Ligeti's *Horn Trio* (1982) and *Hamburg Concerto* (1998-99; 2003). Ligeti writes about his own work on the Hamburg Concerto: "*In this piece I experimented with very unusual non-harmonic sound spectra. In the small orchestra there are four natural horns, each of which can produce the 2<sup>nd</sup> to the 16<sup>th</sup> overtone. By providing each horn or group of horns with different fundamentals I was able to construct novel sound spectra from the resulting overtones. These harmonies, which had never been used before, sound 'weird' in relation to harmonic spectra. I developed both 'weird' consonant and dissonant harmonies, with complex beats.*" My own Double Concerto utilizes four valved horns, the two soloists accompanied by two obbligato horns in the ensemble, each freely alternating between valved and natural horn technique. I sought to explore my (complex) relationship as a composer to classical repertoire, and in the same way that Ligeti draws from Brahms, I in turn take a page or two from Ligeti's book, among others. Throughout my creative life, perhaps no other composer has had such a strong an influence on me; he was the first living composer I became aware of, and I was immediately fascinated by his music. While living in Hamburg from 2010-11 I had the opportunity to study with a number of his former students and close colleagues, including Manfred Stahnke who helped me begin to raise many important questions in regard to my own creative process. I think of this work as the culmination of several years questioning the relevancy of pitch as a larger artistic dilemma; what is it about pitch that we as composers, performers, and listeners gravitate towards, perhaps above all else? We acknowledge music as organized sound, and thus all intentionally organized sound may be considered music. Yet, I find that the majority of composers, even today, remain fixated on this musical parameter more than any other. In the last three years I have been working to intentionally neutralize definite pitch and harmony in my works, favoring the exploration of nearly all other musical parameters and inharmonic spectra. For me, the horn is an instrument that is simultaneously very powerful and yet somehow still extremely fragile and organic in character. In being confronted with a musical situation featuring two horn soloists, I was faced to deal head-on with the issue of pitch within the context of my own musical language.



Eastman Music Nova Ensemble, Brad Lubman, conductor, Rochester, NY March 2014

DOUBLE CONCERTO  $\text{d} = c.78$  19

8va

A Fl. poco accel. timbral trill ff

Ob. port. ppp timbral trill

B. Cl. port. mp timbral trill

B. Cl. port. mp timbral trill

Bsn. port. pp timbral trill

Hn. I 5 4 choked, molto sforzando 3 4 Eb. 4 3 4 3 4

Hn. II 5 4 3 4 ff sforzando Eb. 4 3 4 3 4

Hn. III 5 4 3 4 ff sforzando G. 4 3 4

Hn. IV 5 4 3 4 ff sforzando B. 4 3 4

C Tpt. 5 4 3 4 ff sforzando

B. Tbn. 5 4 3 4 ff sforzando

Perc. 1 5 4 3 4 ff sforzando

Perc. 2 5 4 3 4 ff sforzando

Perc. 3 5 4 3 4 ff sforzando

Pno. 5 4 3 4 ff sforzando

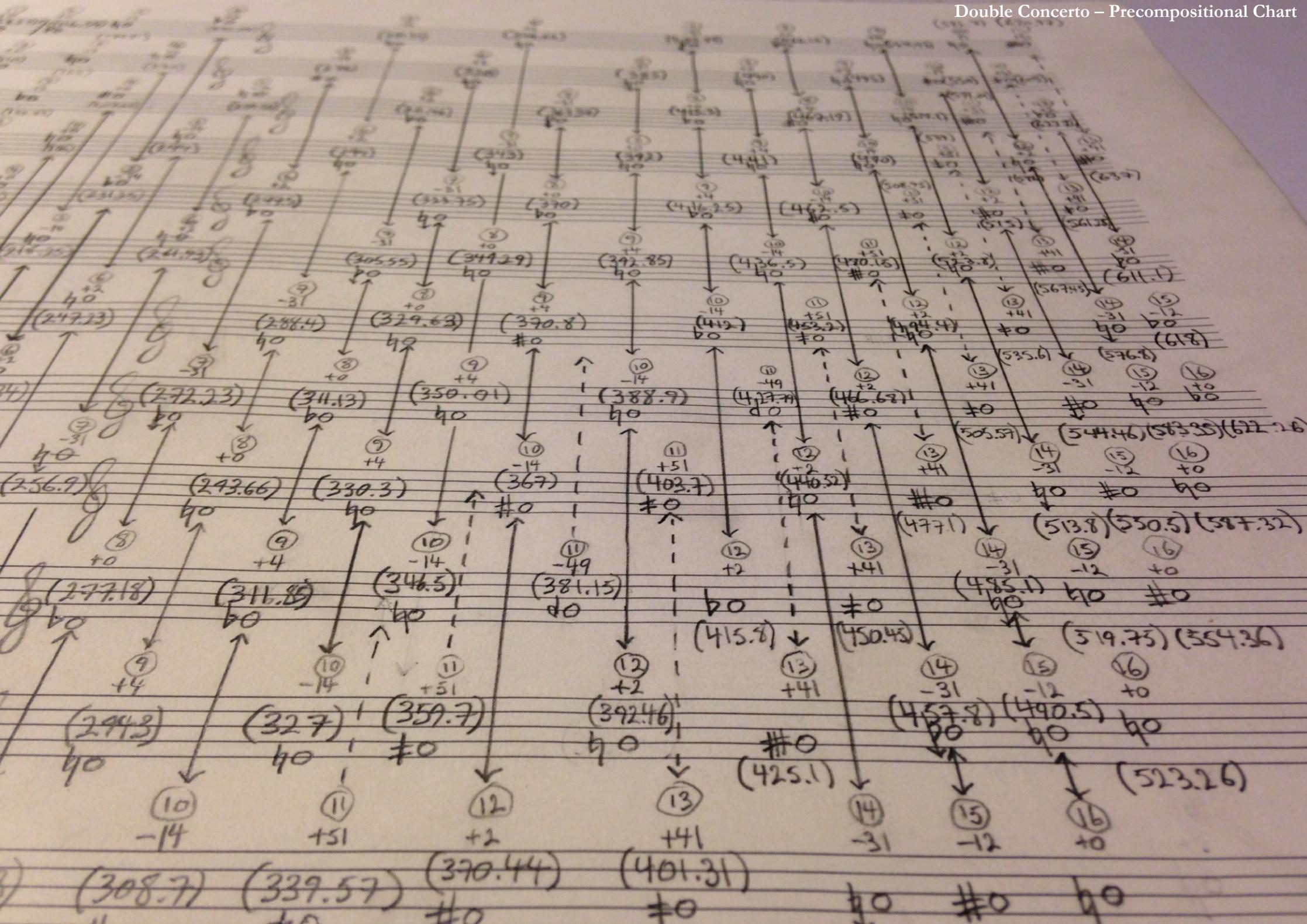
Vln. I 5 4 3 4 5 4 3 4 5 4 3 4 5 4 3 4 5 4 3 4

Vln. II 5 4 3 4 5 4 3 4 5 4 3 4 5 4 3 4 5 4 3 4

Vla. 5 4 3 4 5 4 3 4 5 4 3 4 5 4 3 4 5 4 3 4

Vcl. 5 4 3 4 5 4 3 4 5 4 3 4 5 4 3 4 5 4 3 4

G. 5 4 3 4 5 4 3 4 5 4 3 4 5 4 3 4 5 4 3 4



# Asymptotic Flux: Second Study in Entropy (2013)

for Alarm Will Sound

Sinfonietta: 1.1.2.1 – 1.1.1.0 – 2 Perc, Piano – 1.1.1.1.1

Video: <http://vimeo.com/109624253>

Score: <http://bit.ly/2fFYTHR>

Commissioned by the Mizzou International Composers Festival and Alarm Will Sound



Alarm Will Sound, Mizzou International Composers Festival, Columbia, MO, July 2013

**Asymptotic Flux: Second Study in Entropy** (*Static Foxy Lump: [II] Second Nudist Tyre Pony*) was written between February and April of 2013 for Alarm Will Sound as the second work in a cycle utilizing shared musical objects and compositional devices. The first, for amplified bass clarinet, violin, viola, and cello, was composed over a three-month period while traveling and hitchhiking throughout Europe, surrounding time spent in Paris and Darmstadt. The experience of frantically seeking opportunities to compose while on the move proved challenging, mostly due to the awkward, impromptu workspaces available to me such as cafes, restaurants, hostels, and the apartments of my various hosts. These were typically quite busy, noisy, and chaotic spaces, influencing the character of the music, as well as the title. **Asymptotic Flux** describes an arguably conceptual device: the low E-flat that simultaneously pervades the work and is non-existent. In the quartet, I imagined that the ensemble is always reaching towards this E-flat as a point of centricity, but never quite arriving, analogous to an asymptote as it approaches infinity. In this **Second Study**, the low E-flat is finally provided by a contrabass subharmonic that both initiates and concludes the work, scarcely audible as a definite pitch, completely unstable, and on the lower threshold of human hearing. The parenthetical subtitle, an anagram of the title proper, alludes to the structural design of the work, borrowing musical snapshots from the quartet while fragmenting and re-contextualizing them throughout stages proportionally related to the 19.6 Hz E-flat in both temporal and harmonic centricity. Originally, I had set out to explore the timbral possibilities of the bass clarinet, utilizing a variety of techniques to produce rich, complex soundscapes and microtonal sonorities that would provide germinal material for the work while unifying the ensemble. This second work is an extension of that same process of exploration. In addition to spectral analysis of bass clarinet multiphonics in various states, additional pitch content is generated through an acoustic analogue to a process known in electronic music as "single-sideband modulation," resulting in a series of combination tones with intervals that grow exponentially (a shape inverse to that of the harmonic series). Many instrumental techniques in this work are employed explicitly to destabilize or distort the timbral qualities of each instrument; the use of vocalizations, scratch tones, and other techniques color the sound to modulate or destabilize the written pitch material, leaving it quite disfigured. The last element regarding organization of pitch material revolves around the scordatura tuning of the cello to the 3rd, 5th, 7th, and 11th partials of a virtual low E-flat fundamental (19.6 Hz, slightly sharp), which is now extended to the contrabass by halving the 3rd and 7th partials while maintaining the same open G as the cello. This allows the execution of unique sonorities very rapidly and with a great deal of precision through the use of natural harmonics. These three verticality types are often superimposed upon one another, with resultant voicings sometimes similar to an "E-type" symmetrical hexachord possessing interval content that I've become partial to (no pun intended). Entropy can be described as the "measure of the disorder or randomness in a closed system," the "loss of information in a transmitted message," the "tendency for all matter and energy in the universe to evolve toward a state of inert uniformity," or the "inevitable and steady deterioration of a system or society" -- taking poetic liberties in reducing the thermodynamic property of "entropy" to simply a unit of measurement for chaos, one might say that this work conveys a state of high entropy in music, thus reflecting the compositional process, the result of the technical demands made on the performers, as well as my state of mind throughout the creation of these works.

Awards: Winner, 2014 Howard Hanson Orchestral Prize, Eastman School of Music

Winner, 2014 ASCAP Morton Gould Award

Nomination, 2015 Gaudeamus Prize – Nominee video: <http://vimeo.com/124589020>



Insomnio Ensemble, Gaudeamus Muziekweek,  
Utrecht, Netherlands, September 2015

# Asymptotic Flux: First Study in Entropy (2012)

amplified bass clarinet, violin, viola & cello (version with electronics May 2013)  
Co-commissioned by the [Switch~ Ensemble], Ossia New Music, and ensemble39

Awards: newEar Fourth Annual Composers' Competition, Winner, 2013

ASCAP Morton Gould Competition, Finalist, 2013

Utah Arts Festival Commission, Finalist, 2013

June in Buffalo, selection for performance, 2013

Oct. 2012 - Ossia New Music Concert, the [Switch~ Ensemble], Rochester, NY

Nov. 2012 - ECMC Concert, the [Switch~ Ensemble], Rochester, NY

Dec, 2012 – Melos 3<sup>rd</sup> Annual New Music Concert, ensemble39, Philadelphia, PA

June 2013 – June in Buffalo, Ensemble Linea, Buffalo, NY

June 2014 – New York City Electroacoustic Music Festival, the [Switch~ Ensemble], New York, NY

May 2015 – MIVOS Quartet + Madison Greenstone, Valencia, Spain

Sep. 15 – New European Ensemble, Gaudemus Muziekweek, 2015, Utrecht, Netherlands

Sep. 2016 – Mivos Quartet + Madison Greenstone, NEON Festival, Las Vegas, NV

Video: <http://vimeo.com/123763683>

Score: <http://bit.ly/2xQwDbZ>

New recordings by Mivos Quartet and the [Switch~ Ensemble] coming soon: <http://jasonthorpebuchanan.com/media.php>



*Asymptotic Flux: First Study in Entropy* was written over a three-month period while traveling and hitchhiking throughout Europe, surrounding time spent at the Manifeste Festival in Paris and Darmstadt. Composing with pencil and paper while traveling can be rather cumbersome, having only short periods of time available to focus, and often taking place in awkward workspaces like cafes, restaurants, hostels, and the apartments of my various hosts. Most of these environments were busy and chaotic spaces, which presented a challenge after having spent most of my compositional activity to date in an academic setting with a piano or other equipment readily available. My original intent when I set out was to explore the timbral possibilities of the bass clarinet, utilizing a variety of techniques to produce complex soundscapes and microtonal sonorities that would provide germinal material for the work while unifying the ensemble. In addition to the sonorities that are worked out through sampling and spectral analysis of multiphonics, additional pitch content is generated through an acoustic analogue to a process known in electronic music as “single-sideband modulation,” resulting in a series of combination tones made by adding two frequencies (for instance, a bass clarinet tone and an open scordatura string of the cello), to one another, producing a series that grows exponentially (i.e. 100Hz+200Hz=300Hz, 200Hz+300Hz=500Hz, etc.). The title comes from an arguably conceptual device: the low E-flat that simultaneously pervades the work and is non-existent. I imagine that the ensemble is always reaching towards this E-flat as a point of centricity, but never quite arrive; analogous to an asymptote, as it approaches infinity. Entropy can be described as the “measure of the disorder or randomness in a closed system,” or the “tendency for all matter and energy in the universe to evolve toward a state of inert uniformity.” (source: American Heritage Dictionary). Taking some poetic liberties in reducing the scientific definition of “entropy” to simply a unit of measurement for chaos, one might say that this work conveys a state of high entropy in music, in stark contrast both to my previous work and to the classical tradition itself. This is a characteristic that I feel reflects not only specific elements of the compositional process, but also the result of the technical demands made on the performers, as well as my state of mind throughout the creation of this work.

# Jason Thorpe Buchanan

Composer & Multimedia/Sound Artist

**Jason Thorpe Buchanan** is a tri-continentially active composer of electroacoustic, intermedia, operatic, orchestral, and chamber works which explore fragmentation, multiplicity, intelligibility, behavior, and the integration of live performance with technology. He is Artistic Director of the [Switch~ Ensemble] and Artistic Associate/Lecturer in New Media and Digital Technologies for Music at the Hochschule für Musik Carl Maria von Weber in Dresden, Germany in the Hybrid Music Lab. He served from 2018-2022 as Department Chair/Lecturer in Composition, Theory, and Electroacoustic Music at the College of Music, Mahidol University in Thailand, 2022 Interim Managing Director of the Mizzou New Music Initiative at the University of Missouri, and 2020 Visiting Lecturer in Composition/Interim Director of the Electronic Music Studios at the Butler School of Music, University of Texas at Austin. His works have been described as “an unearthly collage of sounds”, “sharply-edged”, and “free jazz gone wrong—in a good way.”

As a nominee for the 2015 Gaudeamus Prize, three works were presented by Insomnio, New European Ensemble, and Slagwerk Den Haag at Gaudeamus Muziekweek (NL). His works *walkside, lost* and *gimme shelter* (2015), commissioned by Gaudeamus for Slagwerk Den Haag and by Eklektro Percussion Geneva, both explore the structural intersection of precise physical gestures, fragile sounds, and speech alongside live audio and video processing. As 2018 Artist-In-Residence at the Embassy of Foreign Artists in Geneva, Switzerland, he developed a new, interactive processing environment for *surface, tension* (2018), responding directly to the discrete physical gestures of performers and governing the behavior of both signal processing and triggering through wearable technology, sensors, and gestural tracking.

Scenes from his multimedia opera *Hunger* have received performances at Darmstadt (2014) with Ensemble Interface, The Industry’s FIRST TAKE in L.A. (2015) with wild Up, and the MATA Interval Series in New York City (2015) with the [Switch~ Ensemble]. “*Hunger* is a kind of training session in mental disintegration... An ungodly opera needs ugly music, singers who produce primal sounds, an electric guitar that sounds scraped raw, a wailing orchestra effects, cuts the ear like a knife. Buchanan delivers.” – *L.A. Times*

Jason is the recipient of a 2024 Bogliasco Foundation Fellowship, a 2010 Fulbright Fellowship at the Hochschule für Musik und Theater in Hamburg, Germany as a visiting scholar, commissions from the Mizzou International Composers Festival for Alarm Will Sound (2013), Iktus Percussion (2013), the International Horn Society for the Eastman Musica Nova Ensemble, soloists Jeff Nelsen, Michael Walker, and conductor Brad Lubman (2014), Ensemble Nikel/Tzil Meudcan (Israel, 2014), the Blue Water Chamber Orchestra as winner of Iron Composer (2014), the NY Virtuoso Singers (2015), the Earle Brown Music Foundation for the Talea Ensemble and TIME SPANS Festival (NYC, 2017), the Thailand New Music and Arts Symposium for the TACETi Ensemble and augmented conductor (2019), and for TACETi and extended no-input mixer (2020), a fellowship and commissions from Royaumont for the Talea Ensemble+EXAUDI Vocal Ensemble (2016), and the Académie Voix Nouvelles Ensemble (2017), a German/American Fulbright Commission (2011), the Howard Hanson Orchestral Prize (2014), two ASCAP Morton Gould Young Composer Awards (2014 & 2015), an American-Scandinavian Foundation Grant (2015), 2017 Artist-in-Residence at the Brush Creek Foundation (Wyoming), and 2015 Artist-in-Residence at USF Verftet/City Council of Bergen, Norway.

As a guest composer, conductor, and lecturer, he is widely sought internationally at institutions such as the University of Chicago, Stanford University, TRANSIT Festival (Belgium), TIME SPANS (NYC), Chamber Music Campania (Italy), the Eastman School of Music, University of Miami Frost School of Music, Music Science Share Educators Conference (Shanghai), Queens New Music Festival, MATA, the Thailand New Music and Arts Symposium, Yong Siew Toh Conservatory (Singapore), the Bergen Center for Elektronisk Kunst (BEK, Norway), and dozens of Universities throughout the United States. He holds a Ph.D. from the Eastman School of Music, and degrees in Composition and Music Technology from San José State University (BM & BA, 2008) and the University of Nevada, Las Vegas (MM, 2010), where he taught courses in composition and theory as a graduate student. Current projects include a collaborative work for the [Switch~ Ensemble] at EMPAC, and a solo work for violinist Lauren Cauley and a duo for Zach Sheets and T.J. Borden of the [Switch~ Ensemble], all with generative audiovisual processing systems utilizing wearable technology, being developed at the Hybrid Music Lab, Dresden. [www.jasonthorpebuchanan.com](http://www.jasonthorpebuchanan.com)



## upcoming works

### *The End of Forgetting I*

for Zach Sheets and T.J. Borden (2025) – 15'

bass flute, cello, generative electronics, light, live video processing

### *Hypersigil*

Commission: **Hypercube** (2025) – 13'

t.sax, e-gtr., perc, pno, and audiovisual processing system



### *GRIDS*

Commission: **EMPAC/the [Switch~ Ensemble]** (2025) – 22'

b.fl, b.cl, t.sax, pno, perc, vln, vc, sensors  
live audiovisual processing system



### *Traces*

for the **TACETi Ensemble** (2026) – 15'

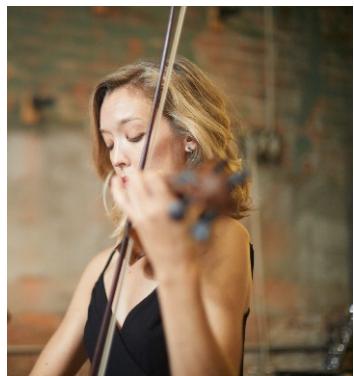
b.flute, b.cl, tbn, e-guitar, cello, audiovisual processing system  
IntAct Festival Bangkok & blurred edges Festival, Hamburg



### *New Work*

Commission: Lauren Cauley/the [Switch~ Ensemble] (2026) – 13'

solo violin, sensors, video and electronics



### *The End of Forgetting II*

Commission: **NADAR Ensemble** (2028) – 23'

b.fl, b.cl, e-gtr, perc, vln, vc, and audiovisual processing system