

Vermont College of Fine Arts

*Centering Given Words for Loadbang*

My Work and Process from 2019-2024

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*Composition at Vermont College of Fine Arts.*

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Benjamin Keller Zervigón

Lisa Mezzacappa, thesis advisor

Master of Fine Arts Thesis

13 July 2024

Introduction:

Unlike many traditional theses, VCFA theses are meant to be a reflection on our individual scholarship and growth throughout our Master's studies. The one-on-one mentorship of our low-residency program centers the artistic and professional goals of the student to create a unique course of study. This thesis was written in fulfillment of the Vermont College of Fine Arts' Master of Fine Arts in Music Composition requirements.

In this essay, I engage in some general background on my work, examining central preoccupations, thematic throughlines and breakthrough transformations. I track the influence history has had on my music and reflect on the power of rediscovery, using my composition *Given Words for Loadbang* as the crux of my discourse.

My deepest acknowledgments go to Lisa Mezzacappa, my thesis advisor, as well as faculty mentors Andy Jaffe, Carla Kihlstedt and Roger Zahab. These incredible teaching artists have renewed my love of scholarship and given me forward looking hope in the development of academia.

## I. Linking Parameters

*“When life itself offers no order and meaning, the musician creates an order and meaning from the sounds of the earth which flow through his instrument.”*

—Martin Luther King, Jr. 1964 Berlin Jazz Festival

### Background

The New Orleans I was born into offered very little order and meaning. Born the youngest of six in 2000, my existence was framed by Hurricane Katrina and its aftermath. From a very young age, my peers and I became aware of just how delicate human networks and structures are, and how quickly they disintegrate. In the years after the storm, it was as if the whole history of New Orleans had thrown up on the present moment. Our culture and city underwent fundamental changes.

As these violent processes unfolded, I turned to music. First to piano, following the example of my brother. After six years of study, when I was around 12, our beloved piano teacher, Rachelen Lein, became too ill to teach me. It was then I started composing. Composition offered me the ability to discover structures—to create and undermine stability. It became an order and meaning in and of itself, seemingly delivered to me from the world around me. When composing, I could turn floodwaters into pitch, weather systems into rhythms. The idea of music reflecting the natural world was hugely important to me and I began seeking ways to actively incorporate natural sonic structures.

In my teens, I became aware of the idea of balancing musical parameters through the writings of Debussy and Schoenberg. This idea of balance—an aesthetic that equally weights the musical parameters of harmony, melody and counterpoint—became very important to me. At the time, this idea seemed wholly manifest in the works of Anton Webern. I became obsessed with Webern's work early in my development, for the way it represents the mechanics of the world. As I employed serial techniques in my own work, I found them less and less satisfying. My lasting interest in Debussy's music cultivated a deeper conception of this "evenness," evenness that is not just about relative proportionality between multiple parameters but also interconnection of those parameters; music whose rhythmic structure is informed or even dictated by its harmonic structure.

The idea of interlocking parameters became an obsession. I began examining how other composers attempted this aesthetic. Turning to Xenakis, I read about information theory. Eventually Yotam Haber, my teacher in high school, introduced me to the music of Tristan Murail and Gerard Grisey. Hearing their work for the first time helped me realize the degree of pre-compositional control that could be applied to music. Through Murail and Grisey's writings I became aware of other acoustic theories such as auditory scene analysis. Concurrently, I was developing a deep love for the seventh string quartet of Ben Johnston, a work with a very different conception of vigorous pre-compositional process than pieces by European avant gardists.

## The Spectral Influence

The basic idea of treating pitch as *signal* shifted my pre-compositional processes greatly. In high school, I began to employ my basic understanding of calculus and signal processing to exert greater precompositional control over my material. This focus on the physical origins of sonic material led me to gain a sturdy understanding of the logarithmically-grounded principle of equal temperament. The techniques I developed, such as register dependent spectra, resynthesis and frequency modulation meshed well with the serial theory I had specialized in with Yotam Haber. These developments brought me closer to my goal of not just balancing, but linking musical parameters.

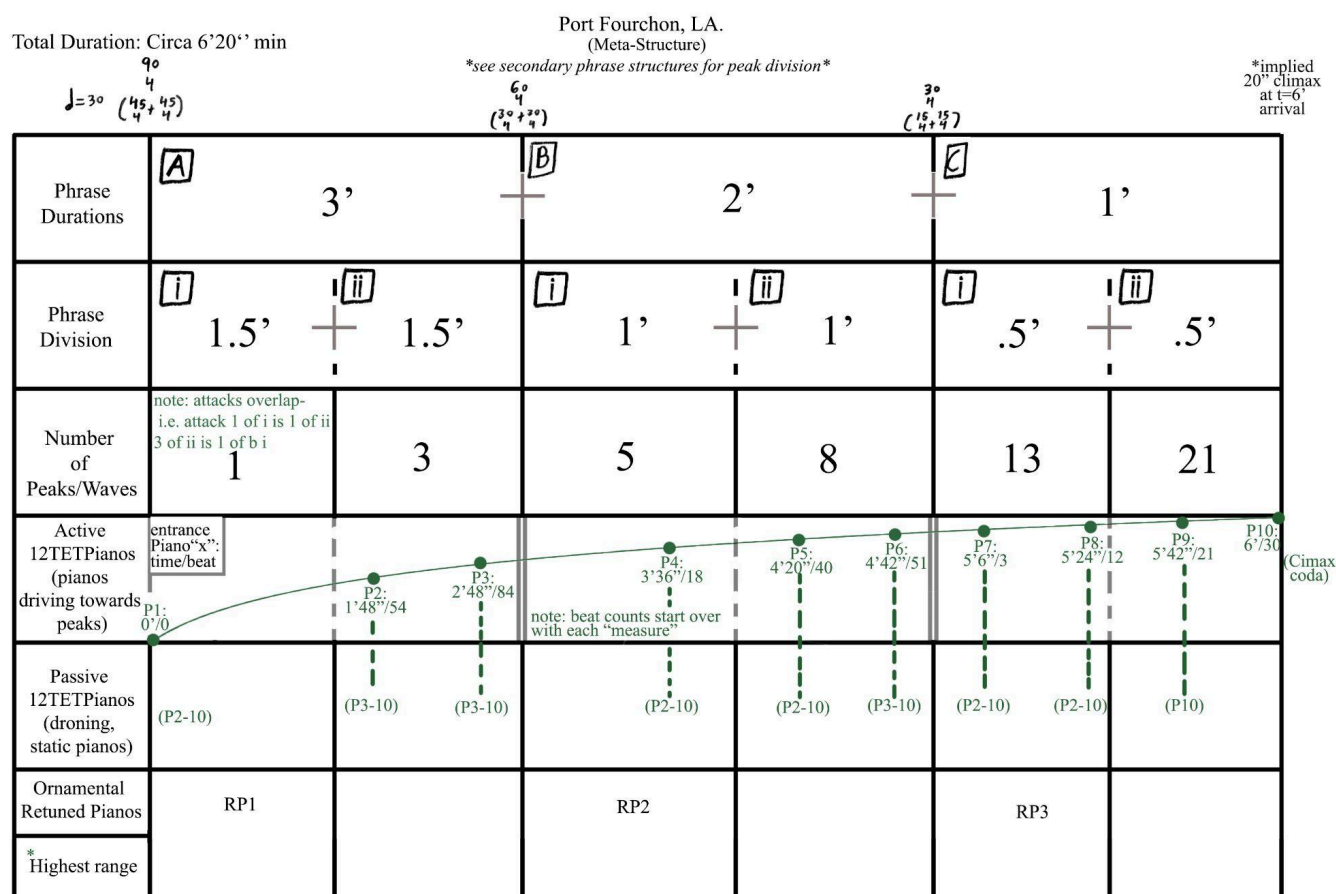
I found initial success in linking musical parameters with the first movement of *Floodgates, I. Ruin of Time* for re-tuned piano solo. This work ties together pacing, density and harmony, using the metallic means and inverse harmonic series as the generative principles. *Floodgates* portrays the record high water levels of the Mississippi River in 2019. *Ruin of Time* is meant to literally depict the holding back of water by the Bonnet Carré Spillways. Occasionally, a bay must be opened, flooding Lake Pontchartrain with sediment. Towers of detuned sixths contend against the increasingly agitated waters emanating from two streams of A harmony, while analog chorus-effected A octaves shimmer glints of sunlight over the rapid, voracious water.

Fig 1. Excerpts from *Floodgates, I. Ruin of Time* (2019) ([Recording](#))

[illegible]

After *Floodgates*, I sought ways to link musical parameters to natural phenomena—or at least the human perception of those phenomena. This desire was realized in *Tide Vessel* (2020-2022), a work that portrays the constant motion of river water, complicated by the massive boats that traverse the Mississippi River. Just as this motion resembles a bouquet of parabolas, I applied a network of skewed logarithms to the rhythm and voiceleading to conjure the lapping water in sound. This direct relation between the subject and sound invites the river directly into the composition. Figuratively, this creates a programmatic discourse of increasing density—like a person floating in the river, gradually being drowned—hemmed in, crowded— by waters and boats.

Fig 2. Pre-compositional process excerpt from *Tide Vessel*



\*Electric Guitar and Horn outline phrase structure\*

\*See range structure for range parameters.  
Each active piano's range increases upwards in a log.



Fig 3. Excerpt from *Tide Vessel* (2022) ([Recording](#))

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The musical score is written on 12 staves, labeled P1 through P12, and two additional staves labeled R+P1 and R+P2. The staves are arranged vertically. Above the staves, there is a timeline with measures 23 through 34. The score includes various musical notations, including notes, rests, and dynamic markings. The dynamics range from *ppp* (pianissimo) to *fff* (fortissimo). There are also performance instructions such as "let ring", "as fast as possible", and "Release transition". The score is handwritten and appears to be a working draft.

Measures: 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34

Staves: P1, P2, P3, P4, P5, P6, P7, P8, P9, P10, P11, P12, R+P1, R+P2

Dynamics: *ff*, *fff*, *f*, *mf*, *mp*, *p*, *pp*, *ppp*, *pppp*, *ppppp*

Performance instructions: "let ring", "as fast as possible", "Release transition"

## Reducing Parameters to Time

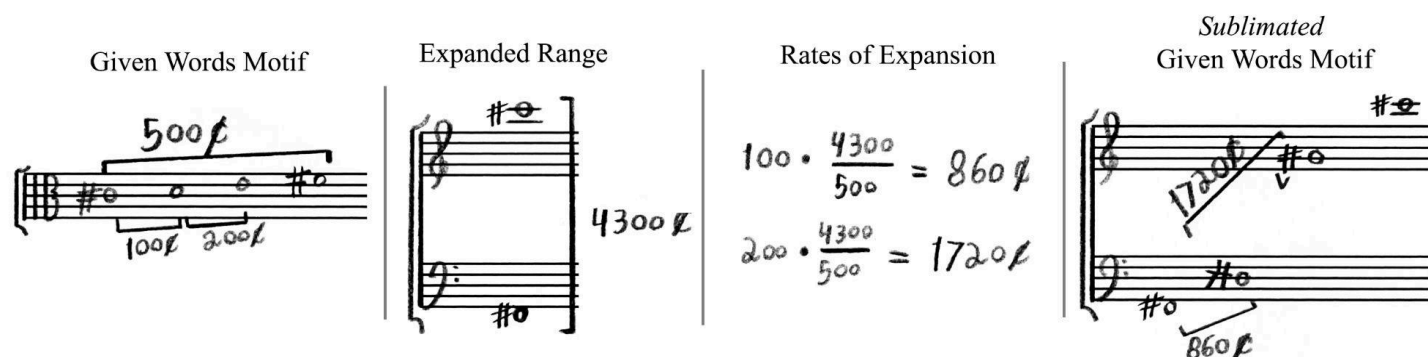
A profound resettling of these basic principles occurred during one of Roger Zahab's lectures at VCFA's Summer Residency of 2023. The topic of Roger's talk was musical time. In his presentation, he expertly demonstrated the ways in which temporal perceptions are impacted by environmental factors. He then elegantly reduced every musical parameter to time, asserting that time is the ultimate medium we work with as composers. Having focused on intuitive musical structuring and the natural intuition that comes from deep listening with Carla Kihlstedt the semester prior, Roger's beautiful summation bridged the divide between intuition and structure. These breakthroughs provided the rationale I needed to achieve an idea of musical sublimation in "...*an order and meaning*..."—something that had interested me since I learned about sublimation in chemistry class at age 16. The composition of "...*an order and meaning*..." was my first attempt at directly linking parameters since *Tide Vessel*.

To create this sublimation effect, I selected and expanded a melody I call the "Given Words Motif" of C#4, D4, E4, F#4. The melody's expanded range was determined using the traditional idea of voice exchange<sup>1</sup>, but displaced by an additional octave—hence F#2 became the lowest note in the melody and C#6 the highest. The principle of proportional expansion<sup>2</sup> was then employed to expand the melody into this new range, resulting in the new chord/melody (rounded in 12-tone equal temperament) F#2, D#3, G#4, C#6. Here, the original half step becomes a major sixth and the whole step becomes an eleventh. This process is outlined below.

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<sup>1</sup>. Voice Exchange: Swapping pitch(es) or passages between two voices

<sup>2</sup>. Proportional Expansion: Changing the total range of a harmony/melody but preserving the scaled relative relationship between intervals.

Fig 4. Proportional expansion example from “... *an order and meaning*...”

This process was repeated, using each new interval as the upper and lower limits of the expanded melody's range until “four voices” were formed between the initial expansion. To then link this melodic transformation to the temporal transformation, the durations of each voice were determined by their degree of expansion relative to the original melody. For example, the initial “sublimation” of the melody whose range is a perfect fourth [500¢] into a melody whose range is a major sixth [900¢] (the bass voice, F#2 to D#3) requires a prolongation of 9/5; if the original melody is considered to last one beat, the expanded melody then must last 1.8 beats. The same principle was applied across all voices. The total duration of the piece is one statement of the most expanded form of the melody (the first expansion, from F#2 to C#6), creating something of a found object canon. In this way, the whole of the piece is *contained* within the first two measures

Fig 5. Full score of “...an order and meaning...” (2023)

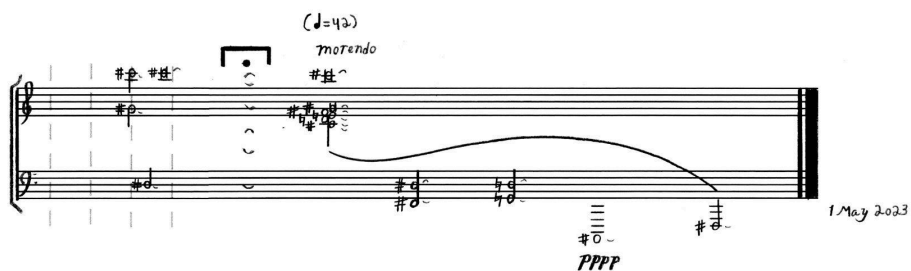
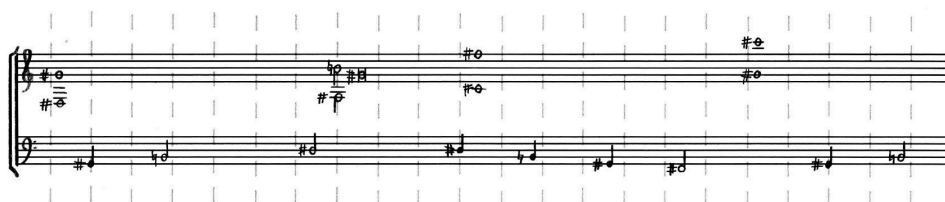
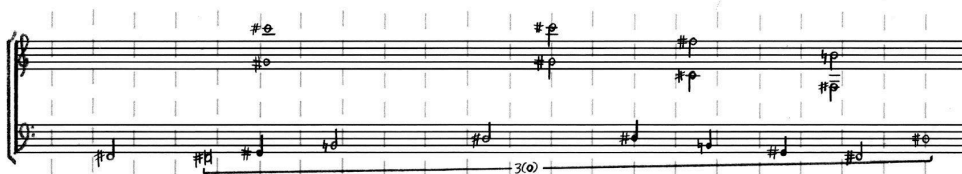
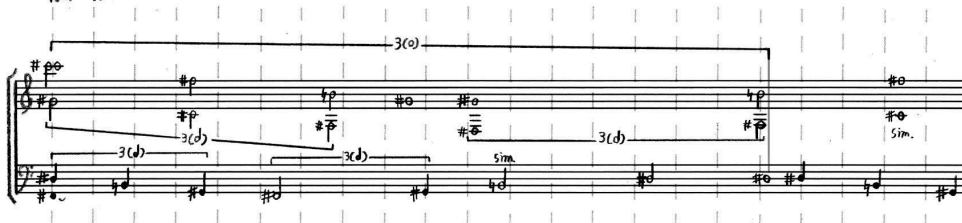
**I. Sublimation**

Canon a 4 Voci

 $\text{♩} = 42$ , Sans Rigueur*P. doux*

Ped. Cont. →

Una Corda Cont. →

 $1\text{cm} = 42\text{rpm}$ 

This work is titled after a quote of Martin Luther King, Jr. that I feel perfectly captures this spirit of art making, its ability to model the natural order of the universe and to find our own meaning reflected in that natural order. This sort of composition is the most expressive form of research for me, fueling my natural creativity and intuition.



## II. Histories: person, place and music

*“ ‘You remember that old town we went to, and we sat in the ruined window, and we tried to imagine that we belonged to those times—It is dead and it is not dead, and you cannot imagine either its life or its death; the earth speaks and the salamander speaks, the Spring comes and only obscures it—’ ”*—George Oppen, *Of Being Numerous*. New Directions Publishing, 1968.

### Historical Narrative

Even more elusive and complex than the *sounds of the earth* are the vast networks of social exchange that facilitate music making both historical and contemporary. No note is made in isolation. Even the most seemingly unique artists are sewn into tapestries of human exchange that go far beyond any individual. Yet, much of the “history of Western music” I was taught in undergrad (the Richard Taruskin history of music) emphasized the unique individual—the composer that seems to break the mold. This style of historical construct is only possible through the foggy lens of memory, in stark contrast to the community-focused, collaborative musical environment I was raised in. The New Orleans of my youth was one where a generational great

would happily make time for a young protégé or to play a neighborhood event—a community much closer to the musical sensibilities of the common practice period than modern academia.

When I left New Orleans to study with Michael Hersch at the Peabody Conservatory in 2019, I felt a need to actively shun these origins—to bury what I viewed as tropes, to avoid “cheesiness” and to earn the label “*uncompromising*.” Despite this, I could not shake my love of New Orleans repertoire or the *casual seriousness* associated with our pedagogy. I needed to reconcile my identity as a New Orleanian with my desire to make intellectually rigorous music. My first step towards addressing this question came the first time I met VCFA music faculty member Andy Jaffe.

At College Hall on the Vermont campus, there was an old reed organ. It was a pretty, dilapidated old thing with bats in the pipes that made me feel at home. After a department-wide meeting, I went to the organ to test out its stops and get a feel for it. I began playing Ellis Marsalis Jr.'s composition *The Fourth Autumn*, a work from the early 1980s that had been given to me by Mr. Marsalis shortly before his death. Someone I would soon discover to be Andy Jaffe strolled up to the instrument and began naming all the chords I played as I played them.

“Whose changes are those?” Andy asked.

“Ellis Marsalis.”

“Yeah, yeah—But whose *changes*?”

“Ellis Marsalis.”

“Yeah man... But who *wrote the tune*?”

“Ellis.”

This exchange sparked an ongoing discussion with Andy, and later Lisa Mezzacappa, which invigorated me to get a better grasp on the musical history of my city. Gradually, my approach to music history was reframed around currents of cultural and social connections interacting with institutions, individuals and power structures. I was exposed to jazz and improvised music communities I had not previously been aware of, demonstrating the many networks of collaborators which feed off of each others' strengths and weaknesses, eventually filtered through memory and historical narrative. This was in stark contrast to the Great Man Theory of my undergraduate education.

This basic reconception of historical narrative was perhaps the most profound shift in my thinking over the last six years. I had long been interested in my pedagogical origins, which through Rachelen Lein, can be traced back to Feruccio Busoni via Rudolf Ganz. This new-to-me framework of history allowed the Busoni connection to spiral out, no longer conceiving of an untouchable master, but an invaluable contributor to community experience. By allowing ourselves to enter into the collaborative networks of past musicians, we bring them new life, joining our practices and communities across time.

### **New Orleans Music History**

Upon moving back to New Orleans from Baltimore, my collaborators and I recognized a need for a new arts organization in the city. With the help of many community members, both artistic and organizational, we created the Alluvium Ensemble, a 501(c)3 non-profit arts organization focused on presenting and preserving local voices and histories. At the time of

writing this, Alluvium is entering its fifth year of programming. Thus far our work has included concerts of classical, traditional and contemporary music, community workshops, multimedia installations and drag salons. The Alluvium Ensemble brings together four generations of New Orleans artists, promoting intergenerational cultural exchange and financial mutual aid.

In spring of 2024, we received an underwriting opportunity to create a full chamber music concert. I worked closely with Alluvium Ensemble members such as composer Roger Dickerson, singer/historian Tara Melvin, pianist/historian Peter Collins and composer/performer Christopher Trapani to craft a program of music examining New Orleans' pedagogical history presented by the Historic New Orleans Collection. Mr. Dickerson is (as of July 2024) 90 years old and has had some influence on nearly every musician to have come out of the city in his lifetime. He is the proud educator of the Marsalis brothers, Terrence Blanchard and so many more artists who have gone on to stellar careers. He lives history.

Through discussions and archival work, I recognized a lost canon of New Orleans music history. Figures like Victor-Eugene McCarty, Samuel Snäer, Edmond Dédé, Basil Barése W.J. Nickerson and Camille Nickerson became foundational to my own conception of our histories. The deep origins of opera within the city as well as the extraordinary [racially integrated!] Philharmonic Society of the 19th century solidified intuitive feelings about the history of New Orleans music.



### **Composing *Given Words for Loadbang***

As I was engaged in this research, an opportunity I had long hoped for presented itself: I was approached to write for Loadbang ensemble, a New York-based quartet of voice, trumpet, trombone and bass clarinet. This was a group of musicians I had greatly admired since I was about 14 years old. Loadbang prolifically records and instigates new compositions, centering the voice of the composer and expressive content of the music above all else. They are true interpreters and advocates. Shortly before Loadbang asked me for a piece, they brought in a new singer named Ty Bouque.

With this shift in the ensemble, I saw the opportunity to create a piece for Ty's unique talents. When I had daydreamed about composing for Loadbang in the past, I had thought about works more typical in my output—works exploring the degradation of Louisiana's landscape. These works lend themselves well to those virtuosos Marilyn Nonken describes in *The Spectral Piano* as “marionette” or “automaton-like;” performers a composer can overwhelm with complexity to create a visceral musical experience. The Loadbang I fell in love with expertly navigated this sort of writing, fronted previously by singer Jeff Gavett. However, Ty's musical ethos is about as far removed from Gavett's as one can imagine. While both are consummate musicians capable of inhabiting a wide range of styles, Gavett is straight-laced and razor sharp, while Ty is seductive and rawly virtuosic. I decided to embrace this shift in the ensemble character and try to capture Ty's personality—to create a love letter to their musicianship. This process of personal distillation is something I have been fortunate to engage in with a number of musicians including with my husband, pianist J.T. Hassell, as well as cellists Chris Beroes-Haigis and Susan Millar Boldissar, flutist Emi Ferguson, singer Marie Herrington,

composer/performance artist Maya Miro Johnson, composer/saxophonist Ingrid Laubrock and now Ty Bouque.

I was taken by Ty's performances of Chaya Czernowin online and watched a number of interviews they conducted with *famous* composers over quarantine through their New England Conservatory-based Ensemble Alinea's "Everything but the Kitchen Sink" series. From this, I became parasocially acquainted with Ty's personality and we began corresponding over the internet. There was an instant feeling of comradeship that I have only ever felt in communicating with another young composer, Maya Miro Johnson: a sense that we have shared goals and desires to transform our musical landscape into something more radically inclusive and adventurous. More than desires, we are all actively taking steps in this direction in our own communities.

Through our digital discussions, the subject of infection came to the forefront. Ty wrote to me about their kinship with other artists who "wrote their way through death" and the ways in which this legacy continued through them. As predisposed as I am to write through and about disaster, loss, and inheritances, I knew this was the seed of our collaboration.

These ideas of infection forced me back to *Given Words*, a series in memory of my drag mother<sup>3</sup> Paul Metoyer who died of COVID-19 complications to pulmonary fibrosis in 2020. This was the same wave of death that had taken Ellis Marsalis Jr. away from us some four days before. Paul was a childhood friend of my mother's who I became close with through the Gay

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<sup>3</sup> Drag mother: someone who teaches another person the art of drag; this usually includes costume building, makeup, presentation and showmanship.

Mardi Gras Krewe, Armenius. Together, we built costumes and organized Armenius' 50th Mardi Gras Ball in 2019 (yes, multiple Gay Mardi Gras organizations predate the Stonewall Inn Riots. Armeinius was founded in 1968). Paul's life history was quite complex. A descendant of the Metoyer family, his life and family history exist in contrast to many of the dominant narratives in the United States around race and privilege. Of High Creole ancestry, the Metoyers shaped much of the history of Natchitoches and New Orleans, Louisiana in both profoundly negative and positive ways. Owner of one of the largest plantations in the region, the Metoyer plantation in Natchitoches, that same family also founded one of the first Black civil rights organizations, The Krewe of Zulu. Hanging out with Paul and the other Armenius' girls was my first time in a community of queers. I absorbed histories of New Orleans liberation and learned of the deep scars of the HIV/AIDS epidemic in our community.

I wanted to track this lineage of sickness through the ages, examining the ways in which loss and infection have been dealt with by queer artists of the past, and the ways those ideas have been inherited by queer people today. In addition, I wanted to represent the linguistic complexity of Creole life by incorporating German and French language texts. I turned to Schubert, dissecting, infecting and reconstituting his last song, *Die Taubenpost*, to symbolize not just degradation but also the filtering of memory through time. My hope was to put Ty in conversation with Schubert, but also to serve as a conduit of Schubert's experience, breathing new life into the most foundational expressive content of Schubert's work—isolation, extraordinary queerness and consummate musicianship.



As I was working through the Schubert, another very different song came to mind, *Aux Natchitoches*, a traditional folk song from Natchitoches, Louisiana. While not explicitly—or even implicitly—queer, I used *Aux Natchitoches* as a catalyst to explore the aquifer-like filter of memory. The song explores a drama between two lovers who can only visit each other on Sundays, until one Sunday the narrator finds their love neither asleep nor dead, dressed in the color of ash—the saddest color for two lovers to wear. This song came to me via my childhood babysitter, songstress extraordinaire, Sarah Quintana. *Aux Natchitoches*’ earliest recordings are by Blind Uncle Gaspard. One has been [uploaded to YouTube](#), but other recordings by Blind Uncle Gaspard have been lost to time. In adding *Aux Natchitoches* to her repertoire, Sarah Quintana recomposed the music based on the memory of her grandmother’s recording of the song. This idea of lost memory, of grasping at a reality that cannot ever be understood, was a perfect complement to the Schubert and to the infection dialogue.

Fig 5. Given Words for Loadbang, iv. Aux Natchitoches (2023) ([premiere recording](#))

iv. Aux Natchitoches  
after Sarah Quintana

vif nostalgique  $\text{♩} \approx 50$   
triple Feel

Retenu

aux Na-tchi-toches  
("Naa-kee-toches")      il y'a-vait un brune \_

au mouvt

à qui je \_ vo-yais      Pas au-tant \_

j'ai que mes di-manches      Pour a-ller la voir \_

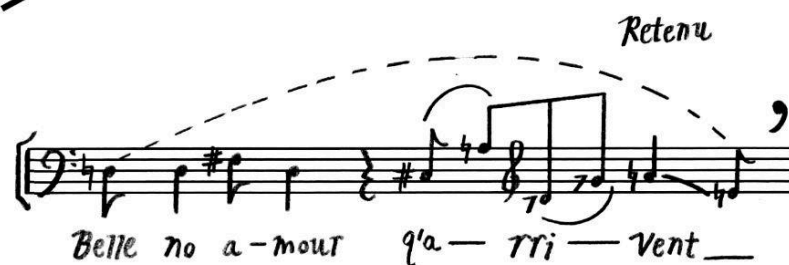
Retenu

j'ai que mes di-manches      Pour a-ller la \_ voir \_


au mouvt

Y Pars un-beau ma-tin \_      Je ne feu-tra-llé

Note: the lyrics for this movement are in Cajun French. Please refer to Sarah Quintana's recording for diction considerations.



*Retenu* *Pochiss.*

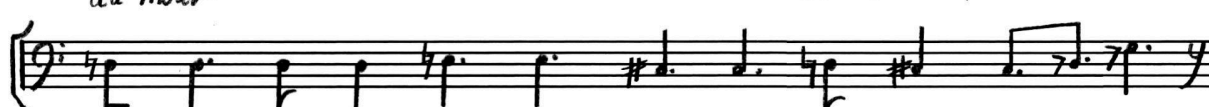


Pre-nnez les dans la cou-leur des cendres

==

*Suddenly*  
*half tempo*  
*(lent)*


*au mour<sup>t</sup>*



Parce que c'est la plus triste cou-leur Pour deux que vie en \_

==

*End of iv.*



lan-gueur — .

In this way, we cast repertoire as infection and memory. A memory of a time before the body degraded, trying desperately to inhabit the life of a *schwammerl* like Schubert plunking away marvels at his piano for a small group of friends, or maybe a blind old man singing legends of the plantation. We as performers are constantly trying to reinvigorate the lives and works of others, but inevitably that life or work decays and our basic conception becomes more distant from the lived experience. The transmission and transformation of memory becomes the act of performance. Inheritance, degradation and reinvigoration are at the heart of this collaboration.



### III. In Memoriam

*“A seam in the dirt divides past from present: rope I once set down  
in the sand of the levee, or the girls asleep with me between them,  
as if the three of us will ever again be a single body...”*

—Nicole Cooley; *Recto, Verso* from *Mother, Water, Ash*. LSU Press, 2024

[\(Recording of multimedia setting 2021\)](#)

#### Reflecting on the Given Words Motif

*Given Words* is my longest-running series to date. The genesis of this project came in spring of 2020 following Paul Metoyer’s death. I set his final correspondence for voice alone, each day creating a new arrangement for a different solo instrument. Eventually, I was left with 27 miniatures, entitled *Given Words Book I*. Around this same time I composed a number of small songs for two voices, half of a violin suite and a full piano suite entitled *Piano Cantos from Given Words*. Consciously, I stopped working on this series from 2022–23. Even though I was no longer directly composing in the series, I found myself again and again coming to the same motif of C#, D, E, F# (with different degrees of microtonal clarity) as a means to express the corporeal remains after grief or death—the lifeless body, wet ground or jar of ash.

Whether death by COVID, accident, murder or overdose, the past decade of my life has been marked by personal loss. These tragedies have found their way into my work. While each musical composition grappling with death is different, tailored to each experience, the Given Words Motif is present in all of my pieces examining loss. The motif seemed to be orbiting death itself.

The first work after *Given Words* that this motif found its way into was a suite in memory of my grandmother entitled *Foremothers* (which currently exists in versions for solo violin and solo cello). After a first movement which sequences a constantly expanding minor chord, the Given Words Motif enters in *i. Death Sound* (retitled *ii. Passion* in the cello version). In this instance, the motif directly represents the process of death—passion shuttering in the throat.

Fig 6. Except from *Foremothers II for Cello Solo mvm ii. Passion* (2023) ([Recording](#))

### i. Boanerges

*attaca!*  
Very free thunder like

*Poco a Poco Rit.*

*Senza misura*  
Lento

*legno*  
basso

*tune instrument if needed*

*f* *Poco* *f* *Poco* *ff* *Poco* *f* *Poco* *ff* *molto* *f* *Poco* *sfz* *sfz* *sfz* *sfz* *sfz*

### ii. Passion

*Grave*  
*Sotto voce*

*Sim.*

*mp*

*very close to the nut, move bow toward fingerboard with great pressure - creating a choked, sputtering sound.*

Similarly, in *Piano Cantos* from *Given Words*, the motif is violently streaked across the keyboard—it is music full of extreme grief, angst and violence. Now however, with the



Fig 8. Excerpt from *Epitaph in Rust (Anthony Clawson in Memoriam)* from *Esquisses 5ème Cahier* (2023) ([Recording](#))

Senza Casura

Ped. Senza Ped.

f Poco decresc. mf

Adagio Cantabile

Senza Rall. no aient

P. dolce

pp

Fig 9. Excerpt from *Inertia of the Red-Orange Moon* from *Esquisses 7ème Cahier* (2023) ([Recording](#))

Gust-like

pp

mf

28 August '23

This transformation of the Given Words Motif from violence to writhing stability and ominous warmth reached its peak with my compositions “... *an order and meaning...*” and “*Like children, Seeking love...*,” another composition which utilizes proportional expansion/contraction of the Given Word Motif. This time, the motif is fully transformed into rapturous beauty. Originally, “*Like children, seeking love...*” was part of a [cycle of songs](#) on *Image of the Engine* by George Oppen. This usage was meant to portray the sublime dissolution of structure, the peace and comradery after a disaster, the relief after a death.

### Collecting What Remains

Through reflection on my own output, I tracked my relationship to loss, grief and violence. From the horrors of natural disaster, to the everyday grief of losing a relative, to random acts of fatal violence, my output has served as a catalog of grief. In going back to the *Given Words* series for the Loadbang piece, I saw an opportunity to track these threads. I assembled all the related material. I arranged, rearranged and recomposed past works. I selected works to create a tapestry of experience, hopefully mirroring our own experiences of death and resilience. As Sarah Quintana once sang, “*death is here for life.*”

In its final form, *Given Words for Loadbang* exists as a sprawling work born from years of writing and listening. Literally, the sublimation canon of “... *an order and meaning...*” was given new life as a sort of ensemble overture. This arrangement, which could also function as a standalone work as it did in its original form, now gets subsumed by a tormented chorale drawn out of *Piano Cantos from Given Words*, finally leading into a reading of poems on loss by Nicole Cooley. Together these disparate parts become *Given Words for Loadbang I. “a seam in the dirt*

*divides past from present...*” inviting the listener into the fraught process of memory, and reflecting the timeless confusion of physical existence. I similarly transformed “*Like children, seeking love...*” arranging it for piano solo and finally for Loadbang.

Fig . Sublimation canon excerpt from *Given Words for Loadbang I*. “*a seam in the dirt divides past from present...*” (2023)

I. “a seam in the dirt divides Past From Present”

attala 2cm ≈ 45

Ty  
(tap Foot)

Andy

Will

Adrian

p, doux, cantabile

tenuto

tenuto

\*Ossia: Ty may choose to conduct instead of or in addition to the foot-tapping.

\*\*In this section breath Marks are physical, not temporal

Fig 12. The original chorale from *Piano Cantos from Given Words* (2021) ([Recording](#))

like a distant Choir of the Dead - longing filled. expand - - - - - (J ≈ 35) tighten - - - - - Cresc. expand - - - - -

Fig 13. Chorale excerpt from *Given Words for Loadbang I*. "a seam in the dirt divides past from present..." (2023) ([Recording](#))

4/2 to-very word for the un-love-ly  
sim. più p  
mp n n

5/2 *Pochiss. Più mosso*  
Desperately longing Filled  
How to keep from va-ni-shing if we say  
p mf, Cantabile f  
mf, Cantabile f



Fig . Excerpt of “Like children, Seeking love...” for piano solo (2023) ([Recording](#))

“like Children, Seeking love”  
after George Oppen  
to Peter Collins

**System 1 (Measures 15-16):**

- Measure 15: *Pesante, Lointain - Faintly dancing*. Dynamics: *p*, *en dehors*. Pedal: *P, Sotto voce*, *lots of Ped.*
- Measure 16: *Poco cresc.*

**System 2 (Measures 17-20):**

- Measure 17: *Cédez - - - - -*. Dynamics: *mp*. Pedal: *mp*.
- Measure 18: *Subito p*. Dynamics: *mp*, *Subito pp*. Pedal: *mp*, *Subito pp*.
- Measure 19: *a tempo*. Dynamics: *mp*. Pedal: *mp*.
- Measure 20: *Poco cresc.*. Dynamics: *mp*. Pedal: *mp*.



Fig . Excerpt of “Like children, seeking love...” from *Given Words for Loadbang* (2023)[\(Recording\)](#)

III. “like Children, Seeking Love...”

Pesante Tointain  
Dancing

15 ♩ = 184  
16 *p*

Ty  
mm --  
(on “ah”)

Andy  
*p*

Will  
*p*

Adrian  
*p*

## Until Next Time

After performing this musical autopsy to create *Given Words for Loadbang*, I sought out the origins of the Given Words Motif. I searched through many works, looking for what could have been this motif's genesis. The feel of the melody when improvising at the keyboard gives the impression of Debussy, or maybe some degraded Chopin *mazurka*, yet even works closely resembling mine did not demonstrate the spirit of this motif.

One day, while waiting for a young piano student, I was playing through the opening bars of Ellis Marsalis Jr.'s *The Fourth Autumn* and it hit me: this is where the motif resides. This piece, given to me by a musician I revere like few others, gave life to my creativity through some of our darkest experiences. This gift I find to be music's greatest offer, the promise of fellowship and love, beyond time yet constituted of it.

Fig 14. Excerpt from Ellis Marsalis Jr.'s *The Fourth Aumn* (©Branwynn Music, Inc.)

(Recording)



While there is a sense of continuity and directionality in my compositional process outlined in this section, for me this work is never over. My relationship with these materials, performers and experiences will continue to evolve and, without doubt, will appear in future compositions. Music is my journal. My pieces are inseparable from my lived experiences. By choosing to represent the world around me as best I can, I link the parameter of human experience to the constructs of melody, harmony, counterpoint and timbre. Just as nature delivers musical order and structures, for me, experience delivers meaning.



*“My daughter, my daughter, what can I say*

*Of living?*

*I cannot judge it.*

*We seem caught*

*In reality together...”*

—George Oppen, *Of Being Numerous*. New Directions Publishing, 1968

## **Appendix: Overview of Microtonal Notation**

### **Accidentals and Their Rationale**

The foundational goal of my accidental system is to access the colorful intervals of the harmonic series with the precision and flexibility of 12-tone and chromatic music. Untempered intervals are often heard in performances of smaller chamber ensembles and solo works without keyboard. It is my hope that by notating these intervals precisely, performers will become more aware of when they are employing pure intervals or not rather than just being “in tune with the piano/orchestra,” or using “*expressive* intonation.” This sort of thinking allows for more conscious interpretation of classical repertoire as well as new possibilities for music of the future.

Note: my accidental system is not designed to support music which modulates in the traditional sense- that is to say tonal drift is clunky, though not impossible, to notate using this system. If one is interested in preserving the “distance to/from tonic” relationships that give so much life to standard repertoire, I would recommend employing Helmholtz-Ellis Just Intonation or Ben Johnston’s system; see also *How Equal Temperament Ruined Harmony* by Ross W. Duffin.

## Harmonic Series Informed Accidentals

The inspiration for the design of my accidentals comes from the work of Ben Johnston.

Fig. 15 Avant Propos from Ben Johnston's 7th String Quartet (Smith Publications)

### TUNING GUIDE

Play in extended just intonation. Uninflected notes indicate C major just intonation: F;A;C and G;E;G and G;B;D are just major triads (4;5;6). Thus a 5th above B (or B $\flat$  or B $\sharp$ ) requires a +, as does a major or minor 3rd above D (or D $\flat$  or D $\sharp$ ). Similarly a 5th below A (or A $\flat$  or A $\sharp$ ) requires a -, as does a major or minor 3rd or a 5th below F (or F $\flat$  or F $\sharp$ ).

#	( $\times \frac{25}{24}$ )	raise by 70 cents.	
$\flat$	( $\div \frac{25}{24}$ )	lower by 70 cents.	
+	( $\times \frac{81}{80}$ )	raise by 21.5 cents.	21.51
-	( $\div \frac{81}{80}$ )	lower by 21.5 cents.	
L	( $\times \frac{36}{35}$ )	raise by 49 cents.	} 48.77 7th partial relations.
7	( $\div \frac{36}{35}$ )	lower by 49 cents.	
$\uparrow$	( $\times \frac{33}{32}$ )	raise by 53 cents.	} 53.27 11th partial relations
$\downarrow$	( $\div \frac{33}{32}$ )	lower by 53 cents.	
$\sharp$	( $\times \frac{65}{64}$ )	raise by 27 cents.	} 13th partial relations
$\flat$	( $\div \frac{65}{64}$ )	lower by 27 cents.	

While Ben Johnston's system does not lend itself to my compositional goals, I greatly admire the system as a whole. Johnston uses a little 7 to represent seventh partial relationships. Similarly, he uses 13 for thirteenth partial relationships. I find this conceptual elegance easy to understand and quite inviting. Johnston, however, never notates his fifth partial relationships, rather they are assumed inherent in the music and informed by the declared tonic in the paragraph above the accidentals. This is reasonable as Johnston does not typically employ tempered thirds. Unfortunately, this does not suit my desires.

I have taken Johnston's "number accidental" idea and applied it to my own language. Unlike his, *my accidentals are all relative to 12-tone equal tempered pitch centers by default*. Untempered pitch centers may be used by synthesizing these accidentals, or simply by applying multiple of them to a single note, though this is not typical in my work.

### **Extensions of Temperament**

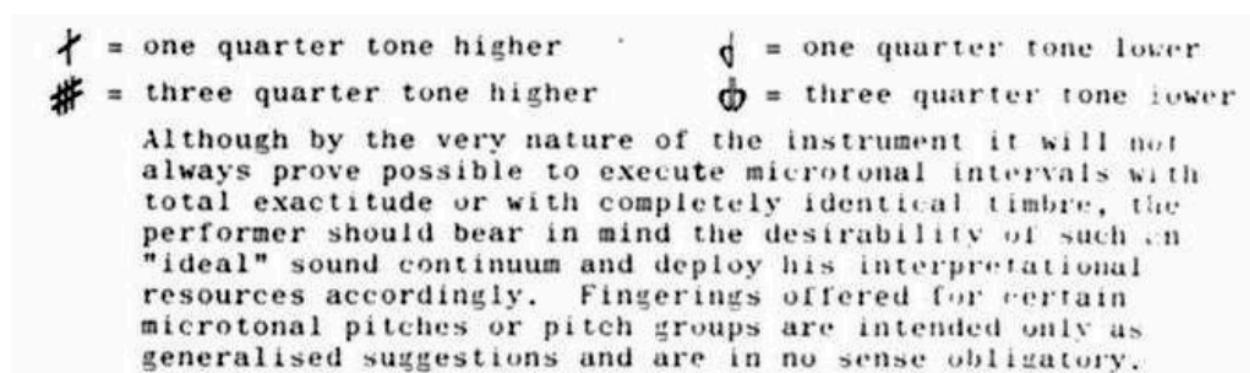
Throughout the history of Western Classical Music, especially in the 19th century, a push towards denser melodic and harmonic motion has been constant. In many composers' music, this manifested as use of chromatic motion- forcing instrument builders and performers to adapt to new tuning challenges. Builders rose to the occasion, developing systems like valve horns, fine tuning pegs, the Bohm system and more.

The trend of increasing density did not stop with the settling of the 12-tone system. Composers have continued to explore additional temperaments, further dividing the octave. The quarter tone serves a dual purpose in my language: as an estimation of the 11th harmonic partial

from an equal tempered pitch center, and as an extension of chromaticism. The relative ease of tuning a quarter tone on string instruments can be likened to half-steps; that is to say that they are challenging at first but quickly become fundamental to a technical practice after having been acquired and practiced.

While this is theoretically practicable on string instruments, trombone and many other instruments, it should be noted that each instrument has its own limitation around quarter tones. Rapid microchromatic motion should not be assumed on all instruments, in all ranges. However, as was the case with the historical implementation of half steps, instrument builders are beginning to create new systems to accommodate perfectly in tune quarter tones such as the Kingma System Flute and the quarter tone guitar. (See section IV iv.) Many composers such as Brian Ferneyhough use these new and assumed developments as justification to write microtones which are currently not possible in the notated range- in effect providing a challenge to the future of instrumental music.

Fig. 16. Avant Propos from Brian Ferneyhough's Time and Motion I (Edition Peters)



Many composers today have continued exploring alternative temperaments, such as systems that divide the octave into steps larger than a whole step, *macrotonality*. By precompositionally linking the pitch content to the temperament system, composers may design pitch collections in a way similar to choosing a collection in pitch class set theory- consciously choosing a temperament that contains the intervals desired for their composition.

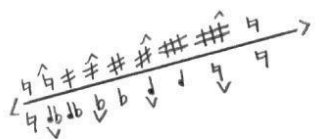
While the implementation of alternative temperaments has yielded interesting results, it is not something I have employed in my music. Rather, I choose to extend the basis of 12-tone equal temperament- visiting other temperaments grounded in the chromatic scale. I do this because the 12-tone system allows for extremely close approximations of the first nine harmonic partials (a nine limit system). By extending this to a 24-tone (quarter tone) system, we can now closely approximate up to the 13th partial (a 13 limit system). The factors at play that influence these choices can be likened to the need for base change operations in calculus: certain harmonic ratios are easier to represent in certain temperaments, just as many irrational numbers in base 10 become rational in base 12.

This extension of 12-tone equal temperament fused with principles of just intonation allows for an extensive palette containing the flexibility and agility of 12-tone music as well as the color and nuance of just intonation.



Fig 16. Performer's guide to my accidental system

## General Notes on Intonation:



: quarter and eighth tones.

Quarter tones should be as close to in tune as possible

### 5th Partial Relationships

$\flat, \flat, \sharp$   
( $\flat, \sharp$  etc.)

*The number 5 is superimposed on traditional accidentals, indicating that pitch should be played with the intonation of a fifth harmonic partial- the harmonic two octaves + a major third above the fundamental*

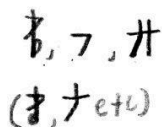
- a 4:5 ratio tuned from the tempered major third below.
- a pure major third tuned from the tempered major third below.
- -13.69¢ from nearest 12 tone equal tempered pitch. 13.69¢ flat
- About a twelfth tone flat
- “As if a fifth partial”
- Example:  $C\sharp 5 = 550h$  (tuned from A)

$\flat, \flat, \sharp$   
( $\flat, \sharp$  etc.)

*An inverted 5 is superimposed on traditional accidentals, indicating that pitch should be played with the intonation of an inverted fifth harmonic partial.*

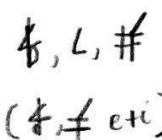
- a 5:6 ratio tuned from the tempered minor third below.
- a pure minor third tuned from the tempered minor third below.
- +13.69¢ from nearest 12 tone equal tempered pitch. 13.69¢ sharp
- About a twelfth tone sharp
- “As if an inverted fifth partial”
- Example:  $C\flat 5 = 558.77h$  (tuned from A#)

## Seventh Partial Relationships



The number 7 is superimposed on traditional accidentals, indicating that pitch should be played with the intonation of a seventh harmonic partial—two octaves + a minor seventh above the fundamental.

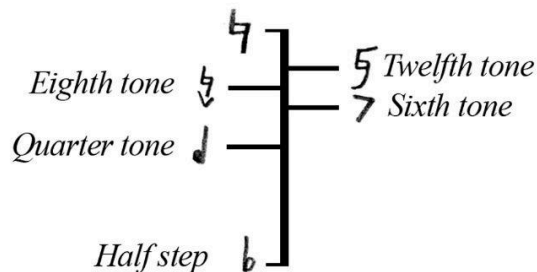
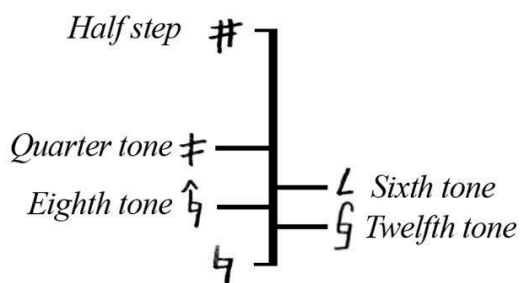
- a 4:7 ratio tuned from the tempered minor seventh below.
- a pure minor seventh tuned from the tempered minor seventh below.
- a 7:8 ratio tuned from the supermajor whole step above.
- a supermajor whole step tuned from the tempered whole step above.
- -31.17¢ from nearest 12 tone equal tempered pitch. 31.17¢ flat
- About a sixth tone flat
- “As if a seventh partial”
- Example:  $C\sharp 7 = 544.47h$  (tuned from  $D\sharp$ )



The number 7 is superimposed on traditional accidentals, indicating that pitch should be played with the intonation of an inverted seventh harmonic partial.

- a 7:8 ratio tuned from the tempered whole step below.
- a supermajor whole step tuned from the tempered whole step below.
- +31.17¢ from nearest 12 tone equal tempered pitch, 31.17¢ sharp
- About a sixth tone sharp
- “As if an inverted seventh partial”
- Example:  $C\sharp 7 = 564.44h$  (tuned from  $B$ )

Proportional representation of the smallest intervals:



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