A Performer's Approach to Gideon Klein's Quarter-Tone String Duo and "Fantasietta"

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Abstract: Before his internment in Terezín, Czech-Jewish composer Gideon Klein experimented with many different types of music and compositional procedures like serialism and quarter-tone writing. Klein's 1939-40 Duo for Violin and Viola and "Fantasietta", written in quarter-tones while he was studying in Prague with Alois Hába, is a particularly interesting work from this exploratory period. However, the Duo is hardly ever performed today. There are multiple reasons for this: for almost 50 years, Klein's earlier works were believed to be lost, and were later discovered in the 1990s; the work presents quite a steep barrier to entry for performers, due to its heavy concentration of guarter-tones; and it is unfinished. In addition to these barriers, audiences' ears may not be prepared for this type of music, finding it eccentric and atonal. Klein, who was later tragically killed in Fürstengrube, a sub-camp of Auschwitz, at the age of 26, was part of the rich experimental avant-garde movement of the arts in Prague between the two world wars. Klein captures a type of sound world where, through the veil of this strange new syntax, human emotion prevails at the forefront, offering us a portal into a deeply turbulent world. I will provide readers with some background to the piece and its musical language, an analysis of the work, and a technical guide of suggestions for string players that may expedite the learning process. I aim to make this piece more accessible, and to encourage other musicians to expand their listening and explore this vivid work through a new musical vocabulary. I hope that by initiating a dialogue around its performance practice, this work can eventually stand alongside Klein's other more frequently performed works.

Keywords: Gideon Klein, quartertone, Hába, performance practice, Fantasietta, violin, viola, duo, microtones, Jewish, World War II, Terezín, Prague, avant-garde

Introduction

To Gideon Klein, the barrier between performance, practice, composition, musicology, and other art forms was blurred, especially during his pre-Terezín studies in Prague, where he showed strong versatility and adapted to the uncertain political circumstances. His pre-Terezín works are particularly interesting because we see Klein engaging with and composing alongside his modernist peers, emerging to find his own compositional voice. During what Milan Slavický has described as Klein's "early" (1929-1938) and "middle" periods (1939–1941), the composer experimented with many genres and forms, including jazz, blues, piano concerti, harpsichord pieces, and compositional methods like serialism and guarter-tone writing.¹ Klein's 1939–1940 Duo for Violin and Viola, written in guarter-tones, is particularly thought-provoking and progressive; however, performances of the work are infrequent and the piece has only been recorded a handful of times. We know of only six performances of the work internationally: one in Paris by Ensemble 2e2m,² a lecture recital I gave at Stony Brook University,³ a performance in Calgary by Teng Li,⁴ performances in Prague at Winternitz Villa by Daniel Danel and Ondřej Martinovský⁵ and at Maisel Synagogue,⁶ and the third known Prague performance of the work at Atrium Žižkov, given by me and Czech Philharmonic violist Eva Krestová.7

There are many reasons for this lack of performance tradition and scholarship. Klein's earlier works were lost for almost 50 years and were only discovered in the 1990s in a suitcase in Prague.⁸ As a result, many of these pieces, including the Duo, published in 1993, have yet to be studied, performed, and published.⁹

Additionally, the quarter-tone Duo presents a quite steep barrier to entry for performers, as its heavy concentration of quarter-tones can be daunting and take months or even years for the average classically trained performer to master. The unfinished ending, lack

¹ Milan Slavícký, *Gideon Klein: A Fragment of Life and Work*, trans. Dagmar Steinová, 2nd ed. (Prague: Helvetica-Tempora, 1998), originally published as *Gideon Klein: Torzo života a díla* (Praha: Helvetica-Tempora, 1996), 28.

³ Avery Morris, *Gideon Klein: An Artist Ahead of his Time, Anticipating a World he was not to Inhabit*, with Sophia Sun, performing "Duo pro housle a violu v systému 1/4 tónovém" by Gideon Klein (Stony Brook University, December 16, 2021).

⁴ Teng Li, Duo pro housle a violu v systému 1/4 tónovém by Gideon Klein, concert performance, Calgary.

⁵ "Závěrečný koncert Projektu 8/12"; "Koncert: Gideon Klein a jeho inspirace."

⁶ "Gideon Klein and Forgotten Composers," concert at the Jewish Museum in Prague, Maisel Synagogue, October 7, 2021, originally scheduled for May 12, 2021, but canceled due to COVID-19, https://www. jewishmuseum.cz/program-a-vzdelavani/koncerty/1756/.

⁷ Avery Morris, Eva Krestová, and Akademie komorní hudby, Atrium má Vážný zájem – Akademie komorní hudby (Atrium Žižkov, Prague, March 20, 2024).

8 Slavícký, Gideon Klein, 10.

⁹ Gideon Klein, *Duo pro housle a violu*, ed. Milan Slavický and Vojtěch Saudek (Berlin: Bote & Bock; Prague: Czech Music Fund, 1993).

² Ibid., 121.

of an ink edition of the final two movements, and the unfinished "Fantasietta" sketch also contribute to this. Along with these barriers, audiences' ears may not be attuned to this genre of music, finding it unusual.

I am writing this article through the lens of a classically trained performer and string player who, prior to working on this piece, had little experience with microtones (apart from Bartók and contemporary music). I am aware that there are many microtonal string performers who have committed their life's work to mastering this type of music, perfecting distances even smaller than the quarter-tone, in addition to training their ears to hearing the slightest of microtonal pitch fluctuations. I am, however, approaching this piece from the perspective of Gideon Klein and his body of string repertoire (which includes mostly non-microtonal pieces), rather than the specific genre of more recent microtonal music. As a result, I am aware that some concepts I address may be different and unconventional, but these are connected to my training, learning curve, development, and preparation.

I am addressing other classically trained musicians who may be interested in performing this work. I found it particularly helpful to summarize my own development with this piece and these techniques, though for others this process might be different. I will note that I predominantly use violin examples because I am a violinist and more familiar with this part; however, both violin and viola parts have equal importance in this piece, and Klein evenly distributes both technical and musical material between them.

At first listen, this musical language can sound uncomfortable, strange, and unfamiliar. However, Klein's work is a masterful composition—poignant for the time and "defiantly forward-looking," as described by a *New York Times* critic.¹⁰

My writing will focus on the context of this piece and the quarter-tone syntax, analysis of the work, and a discussion of technical concepts. I aim to reduce the barrier to entry, save performers time in learning this piece, and encourage musicians to expand their voice and musical imaginations, while establishing the beginnings of a performance tradition and open dialogue.

Klein's Duo offers a unique opportunity for musicians to actively engage with a new syntax, and to explore a lens into an incredibly disturbing time, which this work perhaps conveys even more accurately through its microtonal syntax, as opposed to the standard 12-tone system. Ultimately, the piece ignites a conversation about something deeper–the concept of freedom, especially the freedom of the performer. Michael Beckerman discusses viewing a musical score as a historical document.¹¹ In a similar vein, due to

¹⁰ Anne Midgette, James R. Oestreich, and David Allen, "Classical Playlist: Bach, Biber, Gottschalk and More," *The New York Times*, September 16, 2015, https://archive.nytimes.com/artsbeat.blogs.nytimes. com/2015/09/16/classical-playlist-bach-biber-gottschalk-and-more/?searchResultPosition=1.

¹¹ Michael Beckerman, "What Kind of Historical Document is a Musical Score? A Meditation in Ten Parts on Klein's Trio," The OREL Foundation, April 1, 2010, http://orelfoundation.org/journal/journalArticle/ what_kind_of_historical_document_is_a_musical_score.

various ambiguities we'll discuss, this score is a document that demands our critical expression in today's world. Klein asks musicians to not just be conduits but to take on a new role as active participants.

In my research I found the following existing literature the most helpful: Slavický's and Fligg's biographies, an article by Robin Freeman, Skinner's dissertation, and articles on Hába by Lubomír Spurný. Finally, I'd like to thank my mentors and colleagues who enriched my understanding of this piece: Iva Oplištilová, Jennifer Frautschi, Hagai Shaham, Michael Beckerman, David Fligg, Lubomír Spurný, Erika Honisch, August Sheehy, Josef Špaček, Eva Krestová, Sophia Sun, Teng Li, Martin Smolka, the Klein Foundation for making this recording possible, and Czech Fulbright for supporting my research.

Klein and Hába

The development of microtonal music has a deep and rich history, especially in Prague. In a 1938 article, "Is There a Future for Quarter-Tone Music," Artur Holde reflects on music and the state of the world, discussing the music of microtonalists, including Klein's teacher, Alois Hába.¹² Published just two years before Klein completed his Duo, the article is particularly poignant given the time and environment in which Klein was living and composing. Holde asks whether, at this point in history, we have reached a limit to our current scale system. He argues that composers were running out of ideas and, by extension, *pitches* to work with. "The capacities of this limited material have already been exhausted," he writes.¹³

Holde mentions then-recent inventions such as the radio and the theremin. He argues that scale systems should mirror the "[changing] intellectual life," and that the skill level of musicians must also adjust to new times.¹⁴ He writes: "Who... would dispute the fact that it is possible to train the ears of musical human beings to hear with more precision smaller intervals than those to which they are accustomed?"¹⁵ Holde pushes for a finer level of performance, reflecting the intellectual and technical innovations of the time.

Just two years later, Klein began studying with Hába in his course in the "Department for Composition of Quarter-tone and Sixth-tone Music."¹⁶ Klein enrolled in October 1939, while he was also enrolled at Charles University, studying musicology until November.¹⁷

17 Fligg, Don't Forget about Me, 296.

¹² Artur Holde, "Is There a Future for Quarter-Tone Music?" *The Musical Quarterly* 24, no. 4 (1938): 528–533, http://www.jstor.org/stable/739094.

¹³ Ibid., 528.

¹⁴ *Ibid.*, 529.

¹⁵ *Ibid*.

¹⁶ Lubomír Spurný, "Six Observations on the Performance of Hába's Microtonal Music," in *New Paths in Opera: Martinů-Burian-Hába-Schulhoff-Ullmann*, ed. Helena Spurná and Kelly St. Pierre, 221–240 (Vienna: Holitzer, 2021), 1.

He took Hába's class until May 1940: "With the universities closed down by the Nazis, and Jewish students no longer permitted to study, his tutors Hába and Josef Hutter [continued] to tutor Klein privately."¹⁸ A previously "self-taught" composer, Klein was now taking lessons from a master for the first time.¹⁹ Hába's department was later closed during the war due to "ideological reasons."²⁰

Klein began his Duo for Violin and Viola in December 1939 in Přerov and worked on it until February (in Prague).²¹ We will never know for certain whether this work was composed for a class assignment; however, between 1939 and 1940 we also see two works written for similar instrumentation by Klein's peers. Milan Ristič, Hába's student from 1936 to 1939, also composed a duet for violin and viola in the quarter-tone system.²² In addition, Josef Škop, who obtained his degree in 1939, composed a trio for clarinet, violin, and viola in the quarter-tone system.²³ Similarly, Július Kowalski (Hába's student from 1929 to 1933) wrote a suite for viola in the six-tone system and a duet for violin and cello in the quarter-tone system (1936–1937), Radoslav Hrovatin wrote a duo for violin and cello in 1937 for his final work, and F. J. Wiesmayer wrote an invention for violin solo and a duo for two violins in the quarter-tone system.²⁴ Two years prior to Klein's duo, Hába wrote his Opus no. 49: Duo for sixth-tone violins (1937).²⁵

The existence of this work begs the question: Why didn't Klein's later compositions utilize microtones? Perhaps he would have used them, but this could have been difficult for Terezín musicians, many of whom were amateurs (as Klein discusses in his essay, "A few words about musical culture in Terezín").²⁶ Furthermore, this compositional language was increasingly seen as controversial in the political climate of the time.

While no initial performance of the work is known, it is possible that Klein's classmates premiered the work, as "the trainees of the courses usually became the first interpreters of the works."²⁷ As we will see later, it looks like some performative changes were made between the pencil and ink manuscripts (such as fingerings and bowings), so it is my hypothesis that this piece was played by colleagues, perhaps in class. Fligg discusses

¹⁸ Ibid.

19 Slavícký, Gideon Klein, 33.

²⁰ Ibid.

²¹ Fligg, Don't Forget about Me, 157.

²² Jiří Vysloužil and Alois Hába, Život a dílo (Praha: Panton, 1974), 392.

²³ Ibid., 393.

24 Ibid., 391-393.

²⁵ Lubomír Spurný, Jiří Vysloužil, and Jiří Kroupa, Alois Hába: A Catalogue of the Music and Writings, trans. Paul Victor Christiansen (Prague: KLP, 2010), 84.

26 Slavícký, Gideon Klein, 85.

²⁷ Lubomír Spurný, "The Hába School," *Musicologica Brunensia* 46, no. 1–2 (2011): 146, https://hdl.handle. net/11222.digilib/115255. Klein's possible connection with the Prague Conservatory's viola professor Ladislav Černý, which may have inspired him to write his 1940 Preludium for viola.²⁸

Klein's Duo and Analysis

Klein's Duo consists of four movements, with the fourth left unfinished. There are two existing manuscripts of the work – one in pencil and an ink edition.²⁹ The first and second movements exist in pencil and ink, while the third and fourth movements exist only in pencil. In this file at Prague's Jewish Museum, there also exist a few related sketches, including an incomplete but substantial first draft (crossed out) of the Duo's third movement and an unfinished "Fantasietta" sketch. The current edition of Klein's Violin and Viola Duo was published in 1993 by Bote & Bock and edited by Milan Slavický and Vojtěch Saudek.³⁰

In the following analysis, I will be adopting Freeman's term "inflectional,"³¹ Spurný's terms "tonal center," "passing tone," and "athematic,"³² and the "neutral" terminology Skinner uses in describing triads and intervals in between major and minor.³³ I will also be discussing the concept of "blue notes," which I have learned about through the Cutting³⁴ and Kubik³⁵ articles. Similarly, Slavický uses the terms "polyphony" and "free imitation," so I will occasionally use the term "imitative polyphony."³⁶ (I will no longer place quotation marks around the above terms.)

In understanding this piece, I found Freeman's comparison of Klein's Duo for Violin and Cello to Ravel's writing particularly helpful, specifically Ravel's "precedence of line over harmony in his post-impressionist works from the 1920s and 30s."³⁷ This statement relates to Klein's Violin and Viola Duo, and can help us in understanding Klein's use of quarter-tones and the horizontal nature of his writing, rather than the use of vertical harmony.

²⁹ Gideon Klein, Duo pro housle a violu v systému 1/4 tónovém (Praha: Židovské muzeum / Pozůstalost hudebního skladatele a klavíristy Gideona Kleina, 1939–40), inventory number 10(a–d).
 ³⁰ Ibid.

³¹ Robin Freeman, "Gideon Klein, Moravian Composer," *Tempo* 59, no. 234 (2005): 6, https://doi. org/10.1017/S0040298205000276.

³² Spurný, "Six Observations on the Performance," 5, 6, 10.

33 Skinner, "Toward a Quarter-Tone Syntax."

³⁴ Court B. Cutting, "Microtonal Analysis of 'Blue Notes' and the Blues Scale," *Empirical Musicology Review* 13, no. 1–2 (2019): 84–99, https://doi.org/10.18061/emr.v13i1-2.6316.

³⁵ Gerhard Kubik, "Blue Note," *Grove Music Online*, February 11, 2013, https://www-oxfordmusiconlinecom.proxy.library.stonybrook.edu/grovemusic/view/10.1093/gmo/9781561592630.001.0001/ omo-9781561592630-e-1002234425.

36 Slavícký, Gideon Klein, 35.

³⁷ Freeman, "Gideon Klein, Moravian Composer," 6.

²⁸ David Fligg, "(Re)visiting the (Jewish) Archive of Gideon Klein-Terezín, 1941–1944," in *The Routledge Handbook to Music under German Occupation, 1938–1945: Propaganda, Myth and Reality*, ed. David Fanning and Erik Levi, 339–357 (New York: Routledge, 2019), 343, https://doi.org/10.4324/9781315230610.

Movement 1: Andante

Completed in Přerov in 1939, the first movement is categorized by the following: intervals of various 7ths; displaced downbeats; hemiola; what I call dotted half note "stand-still chords," where time stands still and catches up from the displaced downbeat; tonal centers; canonic material;³⁸ fragmented melodies and unison interruptions; contrasting pitch range between instruments; and what I call the "ticking of time" motif, which is often presented as dotted rhythms.

The first movement, marked Andante, opens with a rhapsodic viola solo (like the opening of Klein's Four Movements for String Quartet³⁹) and the melodic interval of a neutral 7th. From the start of the movement, the downbeat feels displaced—as a listener, we are unclear whether the first note is a pick-up or downbeat, and whether the piece is in duple meter or Klein's notated triple meter. This ungrounded feeling lasts until the m. 6 "stand-still chord" where the violin plays a minor 7th, and the music restarts in m. 7, still with an ambiguous feeling of meter lasting until we get another "stand-still chord" in m. 16. The fragmented nature of this movement is something Klein is intentionally exploring. Before m. 6, we get the first rhythmic unison between instruments: contrary motion with a theremin-like, quarter-step shift in the violin, showcasing the continuous nature of the instruments Klein chose (unlike Hába's quarter-tone piano), followed by a lilting motif in rhythmic unison.⁴⁰

The viola's "ticking of time" motif in m. 14 (differing 9th intervals with the open D) creates harmonic rhythm and clashes with the inflectional C_{\perp}^{\sharp} in the violin. This note is uncomfortable and has a magnetic pull towards the following D. The m. 16 "stand-still chord" (a minor 7th in the violin and 9th or 14.5 semitones in the viola) is a redirection point, building intensity to our first arrival: *a tempo* in m. 21, a brief C tonal center reinforced by octaves—a folk influence. While we don't get a traditional, preceding dominant chord, we still feel strong lateral directionality to this cadence due to the violin's high leading tone (B_>), the viola's downward resolution, the crescendo, and the stretching of time (through hemiola and ritardando). Klein plays with our perception of arrival, cadence, and key area as it is mostly implied here. Can these topical elements alone make us feel a cadence even if it is not really there?

The più mosso (m. 26) is the first occurrence of a stable triple meter feel; its waltz-like melodic material, however, is interrupted in m. 33 by a buoyant staccato unison starting with a 7th between parts (measuring 10.5 semitones) and leading to another "stand-still

³⁸ Slavícký, Gideon Klein, 35.

³⁹ Gideon Klein, Čtyři věty pro smyčcový kvartet = Vier Sätze für Streichquartett = Four Movements for String Quartet (Berlin: Bote & Bock; Praha: Český hudební fond, 1993).

⁴⁰ In his pencil manuscript, Klein writes a hairpin towards the middle of m. 7, though in the ink manuscript there is just a unison accent on the final beat of the measure, creating more ambiguity of the beat.

chord" with a major 2nd in the violin.⁴¹ The viola's previous waltz-like motif turns into passing canonic material. This doesn't last, and we are interrupted by unison 4:3 material propelling us to a shorter "stand-still chord" with another 7th in the violin. At this point, the music is heavily fragmented. Klein uses the fragments to ignite energy and forward momentum.

Now the staccato fragments take precedence over the melodic material; they are accented, occur on unexpected beats, and feel folk-like. The previous viola più mosso material reemerges in m. 45 (now pointed and marcatissimo) and interrupts the fragments, alternating between instruments. The material disintegrates into a "cantabile" section in m. 50, shadowed by a frosty tremolo in the viola, bound by no time. A 4:3 unison fragment again interrupts the melodic material, and we are met with a unison arrival point on a Gb in m. 60, a longer "stand-still" moment, though not a 7th as in our previous interruptions. By means of meandering harmonics, unison hemiola material, and an accelerando, we arrive at the Presto, which is also in octave unison. While it appears to be a long phrase, the Presto is actually gradually fragmenting itself into shorter and shorter splices, followed by a grand pause.⁴²

Where we expect a recapitulation in m. 81 (Tempo 1), we get a contrasting timbral texture, which feels as if from another world, ponticello tremolo, and a viola wandering melody. The instruments again stumble upon a rhythmic unison interruption with the same lilting dotted 8ths from the beginning, arriving at another cantabile section (m. 87) accompanied by "ticking of time" triplets in the viola.

We arrive at a foreboding forte section, via rhythmic unison, and through the passing of 4:3 rhythms Klein expands time and slows down the material. The foreboding feeling is captured by the "ticking of time" dotted rhythms in the viola (m. 96); we see various intervals of the 7th in the violin measures later. As the violin line ascends, the viola line descends—feeling more expansive. As Klein creates rhythmical space, he uses intervallic space: the expanding of the interval between instruments to a 7th (m. 101) and then to the octave. In contrast to these big intervals, the quarter-tones appear tiny. The viola continues this "ticking of time" figure, and by some miraculous voice-leading "continuum" both instruments end up in unison on a C, four octaves apart.⁴³ The music dissolves into some glimpse of tonality and hope.

⁴³ Werntz mentions that Joseph Maneri's book *Preliminary Studies in the Virtual Pitch Continuum*, co-authored with Scott Van Duyne, also uses this term. See Julia Werntz, *Steps to the Sea: Ear Training and Composing in a Minute Equal Temperament* (San Bernardino: Frog Peak Music, 2019), 8.

⁴¹ While the dynamic is technically *forte* here, it is interesting to refer to Klein's pencil sketch, as he has included the markings "sempre cantabile" and "*mf*" in the same measure. While Klein's sentiment toward the passage could have changed between drafts, this may be informative in interpreting this passage.

⁴² In the pencil manuscript, Klein writes next to the Presto marking, "non troppo," and the rest of the text is unfortunately indecipherable. As in many of Klein's manuscripts, the composer writes carets over the unison 16 note implying a sort of emphatic accent articulation. It is my belief that that would make the passage easier for the ensemble, and also creates interesting beat disturbance.

Movement 2: Tempo di marcia

Completed in Prague in 1940, the second movement, marked "Tempo di marcia," is more form-based than the first movement, with five distinct sections. It is characterized by its cheeky cadences in C (with ambiguity between major and minor), various string techniques (such as pizzicato, col legno, chords, etc.), dialogue between instruments, and tension between harmony and musical affect.

Klein begins this movement with a buoyant march theme. After the violin opening, we have a dialogue between instruments, the viola line "agreeing" to the violin with an overture-like rhythm.⁴⁴ The celebratory, bouncing triplets in the violin (m. 7) erupt into a "street band" col legno section, as the viola plays an accented marcato melody similar to one in the 4th movement (m. 22).⁴⁵ Through a harmonic whirlwind of pizzicato chords, the sun comes out from the clouds, and we quickly and unexpectedly arrive at a C major cadence preceded by a quasi-dominant chord (in between major-minor seventh and fully major seventh). This is the beginning of Klein's cheekiness.

The next section, "un poco meno," begins with a "tip-toeing" violin triplet motif, which the viola imitates as both instruments are offset by a measure.⁴⁶ This is vivid music: the wider tritone (5.5 semitones) in the violin in m. 25 creates a humorously exaggerated, cartoon-like feel and the exchanged slurred gestures in mm. 27–28 are extremely inflectional. In m. 33, both instruments catch up with each other in a unison, contrary motion fragment (a lilting dotted figure), propelled towards the downbeat and marcato violin line (m. 35). The viola responds with a militaristic yet comical dotted figure with displaced accents marked "poco rit."⁴⁷ and Klein further develops this "atmosphere of improvisation" with freer time.⁴⁸

We momentarily transition back to imitative polyphony, then through contrary motion and rhythmic unison we arrive at another cadence in C major (m. 46 Maestoso), followed by what I feel to be the most violent section of the entire piece.⁴⁹ The bright C major tonality does not change the character of this section—perhaps our lowered leading tone (B¿) was a clue. Harmony and affect are at odds here, just as in the first movement. The dissonant quarter-tone chords in the violin played over accented viola triplets marked fortissimo and "con massima forza" contribute to this turbulence.⁵⁰

- ⁴⁴ The tempo marking is included in Klein's ink manuscript but not in the pencil one. Note: The measure numbers in the beginning of this movement in the existing published edition are incorrect.
- ⁴⁵ In the pencil manuscript, m. 21 in the viola is a subito forte.
- 46 Slavícký, Gideon Klein, 35.
- ⁴⁷ In the pencil manuscript, Klein writes "Con forza" here for the viola solo.
- ⁴⁸ Freeman, "Gideon Klein, Moravian Composer," 7.
- 49 Slavícký, Gideon Klein, 35.

⁵⁰ The placement of the quarter-tones within the viola triplets creates the illusion that the beat is offset by one triplet. Also, Klein includes different accents in this section in the pencil edition, as well as some slurs.

Finally, both parts arrive at m. 60 to C, but to a "neutral" chord, neither major nor minor. Where we expect the dominant, the closest tone we get is a D^J. Measure 60 marks a type of coda to the end, beginning with canonic material exchanged between parts, this time starting with the viola. Approaching the end, we have a progression of dissonant quarter-tone chords (some 7ths) leading up to m. 70. The top pitches ascend scale degrees with a raised leading tone (B_S) signaling forward motion, though the quarter-tone harmony is nonfunctional. The struggle of these chords is felt harmonically, but also physically in the sustained and labored repeated down-bow bowing.

Surprisingly, we end with an unexpected cadence in C ("neutral"), a witty, cheeky, and sardonic ending. Slavický interprets this as a "musical joke" commenting on how "Klein's fellow-students... seriously strove to combine tonal thinking with microintervals."⁵¹ This ending speaks to the irony of Klein's peers abiding by the rules of a new system (microtonality) in an effort to escape the centuries-old tonal system. Perhaps largely because he was "self-taught,"⁵² Klein does not abide by this systemized "tonal thinking."⁵³

In performing the Duo, one might feel a conflict between the jovial rhythm and the ambiguous key area (neither C major nor minor) in addition to the violent material that came before. Emotionally, nothing has really "resolved," yet the cadence and rhythm say otherwise. Klein is playing with our expectations and perception of key, tonality, and musical material.

Movement 3: Maestoso?

The third movement explores the space in between major and minor. Klein writes some of his longest melodic lines here, though these are still athematic, with few distinct arrival points. Klein continues his use of canonic material and inflectional quarter-tones, particularly blue notes. In my analysis, I will also discuss some discrepancies between the pencil manuscript, the omitted pencil draft, and the current edition.⁵⁴

Klein's omitted third movement sketch bears many musical similarities to the other movements, including repeated 16th-note figures in the viola, an expansion of the viola theme from the second movement (m. 37), instrumental unisons, trill motifs as we will later see in the completed third movement, and 4:3 material. There is also an interesting 6-bar pianissimo, unison pizzicato section.

I encourage the violist to look at Klein's pencil manuscript, as it is informative. In the pencil manuscript, Klein writes "Maestoso a la Marcia" in this section, alluding to the opening march.

⁵¹ Slavícký, Gideon Klein, 34.

⁵² Ibid., 33.

⁵³ Ibid., 34.

⁵⁴ Klein, Duo pro housle a violu v systému 1/4 tónovém.

This movement captures a different sound world, in contrast to the previous two movements. Timbrally, there is a feeling that we are moving through a viscous texture and, harmonically, a feeling that we are underwater due to the ambiguous modalities. The beginning is quite daunting for the violin. As a performer, one may feel that there are no bearings because the first interval is a neutral 6th, and then the viola enters with the melody. There is pain and sadness in this movement, and the space in between major and minor creates a feeling of longing and something unfulfilled.



Figure 1: The opening of Klein's first draft of the third movement⁵⁵

We have no clear tempo marking at the beginning, just a suggested "Maestoso." Fligg writes:

In the absence of tempo and dynamics at its opening, the published edition of the Duo, edited by Milan Slavický and Vojtěch Saudek, proposes a maestoso and mezzo forte opening for the third movement. The aborted third movement opens Andante, with the instruments muted, and it can be argued that the extant third movement should follow this type of character, too, thereby providing some elegiac respite in an otherwise energetic work.⁵⁶

I agree with Fligg that Andante could be a fitting tempo marking here, as the existing recordings average between 55 and 70 bpm in this movement. In suggesting "Maestoso," the editors are referring to Klein's existing "Maestoso" markings in m. 27, and especially Klein's m. 31 "a tempo/ Maestoso," implying a sort of ABA structure, which we do not see despite the C cadence (m. 31). It is my opinion that m. 27 and m. 31

⁵⁵ Ibid.
⁵⁶ Fligg, Don't Forget about Me, 157.

are very different from the opening in terms of dynamics, character, and sonority. The suggested mezzo forte dynamic comes from the first pencil draft, and the only marking Klein gives us in the final manuscript is "marcato."⁵⁷

As Fligg suggests, this movement could be performed con sordino. Similar to the unfinished second movement of Klein's Violin and Cello Duo (1941), which bears much resemblance to this third movement, we have little by way of instructions.⁵⁸ An earlier pencil manuscript of the "Lento" from the Violin and Cello Duo also includes the con sordino marking, though this too doesn't exist in the final manuscript. If performers did adopt this technique in the Violin and Viola Duo, some questions would arise: When would the performers take off the mute? And does the con sordino marking apply to both instruments?



Figure 2: An earlier sketch of the second movement of Klein's Violin and Cello Duo, "Lento"59

In the opening viola line of this movement, we are torn between major and minor. The downbeat of m. 3 almost forms a C major chord with a slight augmented quality (with the GL), not following any systematic rules of harmony. We expect the second repetition of this motif (quarter notes, E and B2) to resolve to a major third on the downbeat of m. 4; however, this does not happen, and we are met with the same neutral third. The intentional ambivalence to the intervals is what creates the discomfort and false expectation of resolution—as in Classical literature, repetitions often imply change. Similarly, in m. 5 too, with the soaring violin line, we get an almost-major 6th. As a listener, we have nothing to hold on to. It is my belief that this movement performed without the quarter-tones would have an entirely different effect, more of a lullaby.

57 Klein, Duo pro housle a violu v systému 1/4 tónovém.

⁵⁸ Gideon Klein, *Duo pro housle a violoncello* (Praha: Židovské muzeum / Pozůstalost hudebního skladatele a klavíristy Gideona Kleina, 1941), inventory number 15.

⁵⁹ Ibid.

Where harmony is uncertain, motivic structure becomes more important. Due to the closeness in register, mm. 6–9 feel gnarly and stuck; therefore the viola articulation in m. 9 proves helpful in propelling forward motion.⁶⁰ Measure 10 marks our first arrival point, with unison rhythms and double stops. While we expect a harmonic sequence because of the previous athematic structure, the pitches clash (a G and a G_{\pm}^{\sharp}) on the first beat. Despite how we assemble these pitches, we never get a functional triad, just parts of deconstructed chords (a root and third of an E_{\pm}^{\downarrow} minor triad, and a third and 5th of an E minor triad). The third beat of the measure sounds like a jazz chord (possibly E_{\pm} Maj7#11) followed by an F_{\pm} minor triad, a rare use of functional quarter-tone harmony.

The raised leading tone ($G\sharp$) in m. 12 propels the music to the soaring violin melody above the ponticello viola tremolo in m. 13, using horizontal "harmony" to show direction. The athematic writing begs for a strong arrival point, though m. 13 doesn't feel fixed. For the performer, this passage can feel awkward, though the manuscript is helpful here: We see a lightly notated fermata on the first beat of m. 12, as well as a crossed-out measure before m. 13 with erased viola 16th notes (and a crescendo) leading into the downbeat of m. 13. This reinforces the m. 13 arrival. Additionally, an erased marking specifies a "poco più mosso" over this measure.⁶¹

Measure 15 stands out as an example of an especially inflectional quarter-tone in the violin part (Eb), which we can label a blue note.⁶² The reach of the melody to this note is particularly painful, as we are so close to a F natural, and instead we form a neutral seventh with the following F[#]. The m. 25 unison rhythm and parallel motion between instruments explores the space between the perfect 4th, tritone, and perfect 5th – and brings us to another arrival, the Maestoso in m. 27.⁶³

Here, Klein dances around pitches of the same note name, a type of B tonal center within a narrow range of melodic pitches. Measure 31 marks our next arrival point, imitative polyphony of a 2-bar trill motif.⁶⁴ Klein is giving a nod to earlier Classical or Baroque cadences with a trill and grace notes resolving to the octave C downbeat of m. 31. The trill motif bears resemblance to the main theme (offset by two quarter notes).⁶⁵

The third attempt of this motivic interchange leads us into our closing material, transitioning to a triplet "questioning" dialogue between the two voices. After multiple

- 61 Klein, Duo pro housle a violu v systému 1/4 tónovém.
- 62 Kubik, "Blue Note."

⁶³ In the pencil manuscript, Klein marked this up an octave. It appears there is also a 16th rest written instead of the A in the violin part one measure before the Maestoso.

64 Slavícký, Gideon Klein, 35.

⁶⁵ In the manuscript we have the marking "con forza" here. It is my belief that the greater the interval between the trill and slurred note, the higher the intensity of the material.

⁶⁰ An important performance question is how to observe Klein's slur markings. Should they taper like Baroque or Classical music or be more sustained? Existing recordings differ greatly.

attempts to resolve to C major (each attempt beginning in m. 45 resolves to a neutral triad), both instruments finally "resolve" together, though still with the same neutral chord, preceded by a trill in the viola. There is an intentional frustration and disturbing quality of this lack of ending, like the witty ending of the previous movement.

While most of the musical material is neither major nor minor, there is so much being said musically and gesturally. Klein's language is a veil, with someone screaming, kicking, crying, and being sardonic behind it. Klein presents a dialectic between what *we say* versus what *we think*—perhaps implying an inability, in his world, to speak freely. This particular syntax gives him the freedom to communicate that struggle.

Movement 4: Allegro

The fourth movement is unique for its rhythmic profile, Moravian folk-dance feel, upbeat Allegro tempo, and the fact that it remains unfinished. It begins with a 4-bar theme in the violin, accompanied by a dancing off-beat rhythm; then the theme is passed to the viola. Any sort of harmony in this movement is horizontal and the rhythm is the focal point. For instance, the first three notes of the theme in the violin part spell D, G \downarrow , C \downarrow ; however, the intervals between the three notes differ with each repetition of the theme. This puts an emphasis on the rhythmic profile rather than the pitch, because of what our ear associates as familiar melodic material.

The third repetition of the theme (m. 9) doesn't cadence but instead transitions into a different texture between the parts, consisting of triplets in the viola and more melodic material in the violin, reminiscent of the second movement's Maestoso section, though this time not violent. We are met by the passing of sixths and sevenths in m. 18. We do get two functional chords in the first two notes of m. 19: Both players play 6ths separately resembling a Bb diminished-7 chord followed by a C minor triad. The following sixths and thirds in this measure create a feeling of folk music.

We next get folk rhythms, a 16th-note interplay where both instruments are offset by one 8th note. This leads into the più mosso section with irregular time signatures (similar to the unison motifs in the first movement and the col legno section in the second movement), and a striking viola melody, which resembles the opening violin theme in the last movement of Klein's string trio.⁶⁶

The ending is probably the most important part of this movement to discuss, as it remains unfinished. This brings up various performance questions: Whether to play it rhythmically in time or slow it down to prepare the listeners, making it sound intentional. Programming is also a challenging concept here. What follows an unfinished work on

⁶⁶ Gideon Klein, Trio pro Housle, Violu a Violoncello: Terezín 1944: Streichtrio für Violine, Viola und Violoncello: Theresienstadt 1944 = String Trio for Violin, Viola and Cello: Terezín 1944 (Berlin: Bote & Bock; Praha: Český hudební fond, 1993).

a concert program?⁶⁷ Whether intentional or not, these are the choices Klein leaves us with, and thus the performer takes on a different role here.

I asked the principal violist of the Chicago Symphony, Teng Li, about this ending, as Li recorded the work on her album entitled *1939*.⁶⁸ Reflecting on her and Benjamin Bowman's interpretive decisions, she says:

We tried it a few different ways. We wanted to make the sound go into the air and be a surprise. Like, oh? What just happened? Oh, it finished?... Rather than make it *finish* and sound like – that doesn't sound like a finish. We just wanted to go all the way, and let it develop as a phrase should develop and then just leave it there; so it sounds like there are a lot of possibilities where that phrase could have gone, but we leave it to the audiences' imagination.⁶⁹

"Fantasietta"

Marked "Lento,"⁷⁰ the unfinished "Fantasietta" sketch, from the same archival collection,⁷¹ though "undated" as Fligg notes, most closely resembles the first movement of the Duo.⁷² We have long, athematic lines with a recitative-like feeling, met with fermatas. We see the same dotted lilting figure, as well as a section that mirrors the Tempo 1 (m. 81) of the first movement with tremolo and a searching viola melody. Klein is clearly paying homage to Hába here, as Slavický writes: "Even the title bespeaks Hába's influence... as it was fully in line with his athematic thinking."⁷³

Suggestions for Performers

Through a discussion of technical concepts, I will provide some suggestions that may expedite the process of learning this piece.⁷⁴ I am aware that there exists a breadth of literature concerning microtones in practice, including Julia Werntz's *Steps to the Sea: Ear Training and Composing in a Minute Equal Temperament*,⁷⁵ which contains microtonal

⁷⁰ Klein, Duo pro housle a violu v systému 1/4 tónovém.

- 72 Fligg, Don't Forget about Me, 158.
- 73 Slavícký, Gideon Klein, 34.
- ⁷⁴ All examples are from the Bote & Bock edition. Klein, *Duo pro housle a violu*.
- ⁷⁵ Werntz, Steps to the Sea.

⁶⁷ In a 2023 performance of Klein's Violin and Cello Duo in Prague, as an experiment, cellist Tomáš Jamník and I went straight from performing the unfinished second movement of this piece to a Philip Glass Duo. The audience responded favorably.

⁶⁸ Gideon Klein, *Duo v systému 1/4-tonovém (Quarter-Tone Duo)*, performed by Benjamin Bowman and Teng Li (Azica Records, 2015), https://stonybrook-naxosmusiclibrary-com.proxy.library.stonybrook.edu/ embedded/player/work?s=4181122.

⁶⁹ Teng Li, interview by Avery Morris, "A Performer's Approach to Gideon Klein's Quarter-Tone String Duo and 'Fantasietta'", July 4, 2024.

⁷¹ Ibid.

ear training and composition exercises, and Sevcik's Op. 11 "School of Intonation on an Harmonic Basis for Violin, Op. 11," which addresses the difference between "normal" and "tempered" finger positions, among others.⁷⁶ My suggestions mostly cover left-hand concepts I found useful as someone approaching Klein's quarter-tone music for the first time.

In learning this piece, I found that *adjusting to quarter-tone pitches is essential*. While this technique might be seen as controversial by microtonal experts, an exercise I used to begin learning the piece was to play the quarter-tone pitches as notes in the 12-tone scale but quickly adjust to the notated quarter-tone pitch. Then I increased the speed of this adjustment so that it was imperceptible. In the reality of performance, there exists a window of time in which one can always adjust to the microtonal pitch, and it is unlikely that someone will be able to notice exactly how many cents the note is off by. This adjustment can even be used for expressive and inflectional purposes with approaching blue notes, similar to the way a singer or saxophone player might use a glissando.⁷⁷ In addition, I recommend color-coding every quarter-tone in the music, as Hába's notation, which Klein adopts, makes it difficult to visually differentiate these from standard accidentals.⁷⁸

As I will discuss, the *choice of fingerings is important* in this work, as we must find a balance between choosing expressive fingerings (for example, exploring timbres of different strings, keeping material on the same string for continuity and/or glissandi, bringing out inflectional quarter-tones, etc.) or purely functional fingerings (for example, keeping material stepwise and keeping reference fingers down for accuracy). I explore this in the suggestions below, with diagrams that resemble guitar tablature.

In my interview with Teng Li, she spoke about the importance of the bow in playing the quarter-tones.⁷⁹ I found this too, especially with the inflectional quarter-tones—shaping the inflection with the bow. I also found Klein's bowings to be very gestural in lyrical passages, but also to help enhance the folk elements of the piece, as well as the motivic and rhetorical profiles. As Klein makes use of various string techniques, he is showcasing the instruments he is writing for; it is my suggestion, therefore, to exaggerate these.

Regarding terminology, I use the term "pitch class" to describe all versions of one note. For instance, an E pitch class encompasses E-flat, $E_{<}^{\downarrow}$, E natural, $E_{>}$, $E_{<}^{\sharp}$, $E_{<}^{\sharp}$. Most importantly, I found that in playing this duo, one cannot "excuse the quarter-tones" or play them apologetically, even if they initially sound uncomfortable to the ear. For most

⁷⁶ Otakar Ševčík, School of Intonation for Violin: Op. 11. Book I: Elementary Studies in the 1st Position, Part I: General Introduction (New York: Harms, 1922).

⁷⁷ Kubik, "Blue Note."

⁷⁸ Skinner, "Toward a Quarter-Tone Syntax," 14.

⁷⁹ Li, interview.

musicians, this is a new sound world and syntax of expression. Sometimes it can be difficult to maintain the expression while we are focused on the precision of playing what Klein wrote, but ultimately the musical gestures, rhythm, and expression must prevail, as that is the ultimate function of Klein's quarter-tones.

Similarly, in speaking about Hába's music, Spurný writes:

A performer should be able to free himself from the score of microtonal compositions. Microintervals in solo compositions for string instruments do not arise by mechanical dividing of whole tones and semi-tones, and the performer must therefore rely on musicality to make such decisions in real time. This music should be played expressively with the sensibility that the composer allows the performer a fairly wide intonational freedom.⁸⁰

On a slightly more philosophical note, relating to the third movement: What happens when we try to express something using an unfamiliar syntax? There can be a disconnect from our voice, body, "muscle memory,"⁸¹ and means of expression we've known for years – a gap between what we *want* to say and our means of saying it. Perhaps this struggle was also an intention of the composer, on a physical and performative level. Regardless, I hope this guide alleviates some of the difficulty!

A Self-Referential Left Hand:

Anchor notes

Anchor notes help us self-reference new quarter-tone pitches by keeping certain fingers down on the fingerboard.

12-tone Pitches Lead

If possible, when playing chords, double stops, or a melodic passage, I suggest using the 12-tone pitch as a reference finger to find where the subsequent or simultaneous quarter-tone pitch is.



Ex. 1: 3rd Mvmt, m. 45, Violin Part

⁸⁰ Spurný, "Six Observations on the Performance," 7.
⁸¹ *Ibid.*, 9.

In Ex. 1, the circled notes are the anchor notes. The numbers on the right-hand side of each chord show the order in which I suggest the performer puts their fingers down. The numbers on the left are optional fingerings. This method uses the 12-tone pitches as anchor notes and from there the performer can find the quarter-tones. The rests in the music give us time to prepare our left hand.



Ex. 2: 2nd Mvmt, mm. 5-6, Violin Part

In Ex. 2, keeping the G natural down as an anchor finger helps us to put the new Gd down as close as possible to the previous pitch. As we'll discuss later, using open strings is a suggested option as this enables us to hear clearer microtonal pitch differences.



Ex. 3: 3rd Mvmt, mm. 24-25, Violin Part

In Ex. 3, if we stay in the same position, we can keep the Eb down and then slide the finger slightly higher for the E_{c}^{\downarrow} .

Quarter-Tone Anchors

Anchor notes aren't only 12-tone pitches. Quarter-tone pitches can become anchor notes when these are the only notes we can reference.



Ex. 4: 4th Mvmt, m. 8, Violin Part

In Ex. 4, keeping the $B^{\downarrow}_{\rm c}$ down (most likely the third finger) will help us measure the $D^{\downarrow}_{\rm c}$ a major sixth below.



Ex. 5: 3rd Mvmt, mm. 27-28, Violin Part

Ex. 5 shows a "pitch class" with four different B's. While it is not possible to keep the B down for the entire phrase, I suggest that performers memorize the distinct B natural and B pitches physically and aurally to find the location of quarter-tone pitches.



Ex. 6: 3rd Mvmt, mm. 3-4, Violin Part

In this example, I suggest memorizing the pitch of the first G_{\flat} in order to keep consistent intonation of the melody.

Adjustment is Essential

Adjustment is a tool I found especially helpful in learning this piece. This involves finding 12-tone pitches that our hand already knows and imperceptibly moving our fingers to find the nearby quarter-tone.



Ex. 7: 2nd Mvmt, m. 31, Violin Part

It is very difficult to find this second double stop (in Ex. 7), so I suggest finding a perfect fourth (E and A natural) and then adjusting downward by a quarter-tone.



Ex. 8: 1st Mvmt, m. 14, Violin Part

Ex. 8 shows an inflectional quarter-tone, which we will discuss later. If we undershoot, we have the freedom to approach the note as a singer or saxophone player might use a glissando.

Perfect 5th Tetris

I suggest using left-hand intervals of 5ths to move laterally across the fingerboard and find new pitches, similar to a game of Tetris. Klein's key signature of no sharps or flats allows us to use this technique relatively seamlessly.



Ex. 9: 2nd Mvmt, m. 29, Violin Part

Keep the D[{] finger down and move it laterally across the fingerboard to find the A[{].



Ex. 10: 2nd Mvmt, m. 34, Violin Part

In Ex. 10, I suggest performers slide the F[‡] laterally across the strings to find the B¹, and then measure a minor 7th from the B¹ for the A¹.



Ex. 11: 3rd Mvmt, m. 12, Violin Part



Ex. 12: 4th Mvmt, mm. 1-2, Violin Part





Ex. 13: 4th Mvmt, m. 11, Violin Part

Ex. 13 shows a clear use for this technique. The Cb moves laterally across the fingerboard to the Gb while the A moves to the D.

Tritones and Small Intervals

Tritones and small intervals are helpful tools to find quarter-tones, through the use of open and closed hand frames. Quarter-tone tritones can vary between intervals of 5.5, 6, and 6.5 semitones. For the 6.5 tritone, the fingers are almost on top of each other. We can memorize this feeling and hand frame.



Ex. 14: Mvmt 3, m. 39, Violin Part

Using the Eb as an anchor, we can position the B_c^{\downarrow} as close as possible to it.



Ex. 15: 4th Mvmt, mm. 13-14, Violin Part

In Ex. 15, the tritone is particularly close. Similarly, we can use the Bb as an anchor and then find the E_{c}^{\downarrow} .



Ex. 16: 1st Mvmt, m. 25, Viola Part

This interval in the viola pizzicato (Ex. 16), measures a standard tritone despite the quarter-tones. Therefore, this measures a bit larger than the smallest tritones Klein uses.



Ex. 17: 2nd Mvmt, m. 25, Violin Part

Ex. 17 shows an enlarged tritone (measuring 5.5) which musically contributes to the character of this passage. This too uses a more open hand frame.



Ex. 18: Mvmt 3, mm. 36-37, Violin Part

Ex. 18 is a rare example where Klein uses successive 6.5 tritones. If we use three different fingers, which I suggest, they are all on top of each other. Another option is using the open E string and playing the A_{\downarrow} on the A string.

"Copy / Paste" Intervals

I define "Copy / Paste" intervals as double stops that do not change intervalically but do change in pitch. We really can see this nicely on string instruments, like the violin or the viola, with a continuous pitch spectrum. The successive third and sixth double stops are also emblematic of folk music.



Ex. 19: 1st Mvmt, m. 88, Violin Part

In Ex. 19, the entire hand gets shifted down a quarter-tone; however, the interval of the major 6th remains the same.



Ex. 20: 4th Mvmt, mm. 19-20, Violin Part



Ex. 22: 1st Mvmt, m. 18, Violin Part



Ex. 21: 1st Mvmt, m. 5, Violin Part

Here, Klein's "flautando" helps with this "blurriness" of pitch, a major third moving downward by a three-quarter-tone.⁸²



Ex. 23: 2nd Mvmt, m. 50, Violin Part

While Ex. 23 shows an unconventional fingering, it allows us to keep the same interval rather than shooting in the dark for the second minor sixth.

82 Werntz, Steps to the Sea.

Identify Inflectional Versus Passing Tones

In this piece, sometimes faster tempos make it challenging for performers to accurately play every quarter-tone. On the other hand, inflectional quarter-tones demand accuracy and expression. I suggest identifying and distinguishing between these two types of quarter-tones.



Ex. 24: 4th Mvmt, m. 6

The high concentration of quarter-tones in the violin part is difficult to play at such a quick speed (Allegro). Also because of the speed, the specific differences in pitch are almost negligible and imperceptible to a listener in the audience. This could change which quarter-tones we focus our energy on.



Ex. 25: First Mvmt, m. 14, Violin Part

As noted earlier, we see an example of an inflectional quarter-tone which has identity and suggests being brought out.

Combination Examples

As expected, many passages require a combination of the techniques mentioned above.



Ex. 26: 2nd Mvmt, m. 58, Violin Part

This example is a combination of anchor notes and Perfect 5th Tetris. The circles indicate which fingers I suggest putting down first, and we can move between these notes across the fingerboard laterally.



Ex. 27: 3rd Mvmt, m. 11, Violin Part

Ex. 27 also shows an example of Perfect 5th Tetris and anchors. Using the D as an anchor note, we can find the Fb, then the Cb using Perfect 5th Tetris, and from there the neutral sixth E.



The violin has rests preceding this measure, therefore there is time to first place the 12-tone pitch (A), use this as an anchor note, and adjust to find the Cb and Fb first from their 12-tone pitches. We can also use this technique for the 4th beat.

Fingerings

Regarding the choice of fingerings, I suggest using as many open strings as possible to provide strong contrast with the quarter-tone pitches. With anchor notes and quartertone chromatic motion, I suggest choosing fingerings that allow the performer to keep necessary fingers down. This mostly involves not traveling too much between positions. We see a rare example of what look to be fingerings in Klein's original pencil manuscript of the second movement, supporting the idea of minimal shifting between positions.



Figure 3: Apparent violin fingerings in the 2nd movement of Klein's pencil draft⁸³

83 Klein, Duo pro housle a violu v systému 1/4 tónovém.

Finally, the notes Db, Ab, and Eb are versatile pitches because in first position these can be played on either one of two adjacent strings. For melodic passages, I suggest keeping "pitch classes" of notes on the same string for continuity, though for more technical, faster passages I suggest using what is most convenient and fits with the bow/string crossings.

Ensemble Work

Identify Your Intervals Together

I suggest duo partners identify where their parts are consonant or dissonant with each other, to prioritize the more consonant harmonies in rehearsal. Examples could be playing octave unisons, neutral triads, or intervals together.



Ex. 29: 1st Mvmt, mm. 59-60

This passage is very difficult, as both players have to land on the exact same quartertone pitch, after a jump of almost an octave. In my experience, aiming slightly higher for the G_{\flat} helps with the unison intonation.



Ex. 30: 2nd Mvmt, m. 70



Similarly, this is an example of ensemble unison after a jump in pitch.

Ex. 31: 1st Mvmt, mm. 96-97

The technique of self-referencing quarter-tones doesn't just apply to our own parts but also to each other's parts. In this example, I suggest the violinist matches their C with the viola's open C, which comes a beat earlier.

Conclusion

Spurný proposes the idea that perhaps Hába would have had more success in today's world where electronic instruments "would more precisely express his imagination" rather than his invented instruments—stating that many of Hába's microtonal works and his constructed instruments have "aged considerably" in today's technological world.⁸⁴ Does this logic also apply to Klein's work and the precision required to execute his quarter-tones?

I believe Klein's Duo demands the human element—engagement with, questioning, and interpreting this score. Klein doesn't require us to invent new instruments but rather to grapple with our existing, centuries-old instruments. His piece demands a musical inventiveness allowing critical thought. In a world of AI where our roles as humans and interpreters of Classical music are constantly being tested and challenged, this piece is especially important, as it would not be the same if it were played by a machine, nor could a machine understand the nuanced feelings, metaphor, and subtext evoked by Klein.

By providing context to this work, as well as analysis and performative suggestions, I hope this article creates a dialogue within the music community, encouraging others to play the work, and clarifying certain aspects. From a personal perspective, there is an enormous amount of freedom experienced when performing this piece, as it is especially liberating to break away from our traditional musical language and replace it

⁸⁴ Spurný, "Six Observations on the Performance," 12.

with something new. Klein captures a type of sound world in between precise imprecision and imprecise precision. Like the space in between a semitone, this work too places the performer in a type of liminal space, demanding our expression and role in co-creating the work alongside the composer.

Whether or not Klein was perceiving a world that was ready to trap him and others, he is encouraging a type of freedom in his writing, which is anything but authoritative, using humor, ridicule, and sarcasm to poke fun at those who are bound by a system. Maybe Klein is creating his own musical formula for freedom.

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Winner of a 2023–24 Czech Fulbright Award and a current Doctoral Candidate (in Violin Performance) at Stony Brook University, **Avery Morris** is multifaceted musician whose recent performances specialize in the works of Czech composer and Holocaust victim Gideon Klein. Her Fulbright project, entitled "Gideon Klein's Lost Works and the Legacy of Czech Musical Modernism," focused on transcriptions of Klein's pre-Terezín compositions, specifically his solo violin pieces, which she is currently preparing for performance and publication.