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A practical guide to twentieth-century violin etudes with performance and theoretical analysis

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**A PRACTICAL GUIDE
TO TWENTIETH-CENTURY VIOLIN ETUDES
WITH PERFORMANCE AND THEORETICAL ANALYSIS**

A Monograph

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
In partial fulfillment of the
Requirements for the degree of
Doctor of Musical Arts

in

The School of Music

by

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August 2004

To all of the teachers in my life

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I would like to thank my mentor, Kevork Mardirossian, for all that he has done for me since 1995. A great deal of what is expressed in this paper about violin playing, technique, practicing and musicianship is derived from what I learned in my lessons with Kevork. He has been an inspiration as a teacher and a performer, and I am eternally grateful for having had the opportunity to work with him.

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graphic examples in Denisov and Petrič are testament to this fact. Thanks to Vini (Carlo Vincetti Frizzo) for the library assistance and, most of all, for our collaboration on your compositions (which played a vital role in the genesis of this project). Thanks, also to Tommy (Thomas) Oswald and Hanna Kim for the Sibelius assistance and the many laughs.

I am grateful to the publishers who allowed me to reprint musical excerpts in this document. Those publishers include Breitkopf and Härtel and C. F. Peters. In addition, the excerpts from the collections of Hindemith and Henze are used by permission of European American Music Distributors LLC, sole US and Canadian agent for Schott Musik International.

Thank you to all of my friends and family, who supported me throughout this time—even those who never thought I would finish. My friends Craig and Stephanie, Thomas and Le Khin, Charles, and Cason provided, inspiration, guidance and moral (or shall I say empathetic) support through these trying times. To mom, dad, and Frank, thank you for encouraging me to “get it done” and for your support. Mostly, thanks for my life and the part you have played in it. Like most of the people on this list, you must realize that you are very much a part of the paper’s dedication “To all the teachers in my life.”

Lastly, but certainly not least of all, I come to my wife, Borislava. Of course, I must tell you first how much I appreciate your help with the examples and the advice about violin playing, technique and practicing. I learn and draw inspiration from you each day. Thank you also for your patience during this long, all-consuming process. You are my partner, my friend, and my love.

PREFACE

The twentieth century is now behind us, yet today's violinist does not possess, or is not aware of, a canon of etudes that relate specifically to the literature of this time period. Violinists learn and perfect (as much as possible) the core of studies by eighteenth- and nineteenth- century pedagogues/composers. Even the progression of study, in terms of development and level of difficulty, is fairly well established. Students generally begin with scales and simple studies by Otakar Ševčík and Henry Schradieck, then progress to longer etudes by Rudolphe Kreutzer, Pierre Rode, Jacob Dont, Pierre Gaviniès, Federigo Fiorillo, and culminate with the more difficult studies of Henri Wienawski, Nicolo Paganini and Heinrich Wilhelm Ernst. Naturally, these studies are designed to address technical and musical issues of eighteenth- and nineteenth-century repertoire and are written using a similar language and style. The violinist then relies on this core of studies to stay in shape and improve mastery over technical issues for repertoire of *all time periods* throughout his/her career.

The problem inherent in this approach is that music of the twentieth century does not adhere to nineteenth-century principals, forms, aesthetics, and so on. The use of tonality as a musical language changes beyond recognition, and even disappears, in the twentieth century (except, to a certain extent, with regard to the neo-classical, neo-Baroque and neo-Romantic repertoire of certain composers). Along with a complete change of the musical language comes a reevaluation of the sonic possibilities for each instrument. For further information on this topic, see The Contemporary Violin: Extended Performance Techniques by Patricia Strange and Alan Strange (2001). This book contains information and examples on a vast array of techniques, timbres and

effects for the violin, and includes an extensive bibliography, discography, and repertoire list on this topic. Not surprisingly, the technical and musical challenges that one faces in this repertoire have little or nothing to do with the core of studies by the above-mentioned eighteenth- and nineteenth-century authors.

Until now, a violinist would be forced to meet new challenges in the twentieth-century repertoire itself. Overcoming technical problems while attempting to learn new music can be frustrating. The player must solve a technical problem while contending with unfamiliar notation, unconventional sounds and musical language, and (possibly) limited rehearsal time. My reason for writing this paper relates to my own feeling of exacerbation from precisely this issue.

It first occurred while learning George Crumb's eclectic masterpiece Black Angels (1970), for electric string quartet, and has recurred several times since then in my young career. In Black Angels players are forced to play the (electrified and amplified) instruments in unconventional ways to produce unfamiliar timbres and sounds, chant and speak in several different languages, and play various percussion instruments throughout the piece. The quantity, difficulty and unfamiliarity of the tasks makes the performers feel overwhelmed during the learning process.

On another occasion, while learning Carlo Vincetti Frizzo's Celestial Horizons for string trio (2 vlns., vla., unpublished), I distinctly remember wishing that I could work on a study for octatonic scales and collections to help my ears and hands become accustomed to their idiosyncratic nature. The piece uses exclusively the three different transpositions of the octatonic collection. This collection (and other synthetic scales) are strange and unpredictable to the ear and cause problems for the left hand, since the hand

position is often extended beyond the normal octave framework. Consequently, the appearance of such collections in solo, chamber, and orchestral literature can confuse and frustrate the unprepared violinist. Studies that set forth problems of the type described in the above-mentioned literature do exist, but until now, a violinist would find it almost impossible to locate one to suit a particular purpose—something akin to finding a needle in a haystack (or a book stack).

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ABSTRACT

This document is a partial catalog of what is readily available to violinists for studies relating to twentieth-century repertoire. More studies in this area exist throughout the world, so those presented here are intended merely as a starting point. The document also contains factual information about the studies, as well as performance and theoretical analysis and biographical information about the composers. This information is designed to serve a variety of purposes. The factual and biographical information may be used by the violinist to choose appropriate etudes for himself/herself or a student. Later, the in-depth analysis will assist players throughout the process of practicing and perfecting the studies. The theoretical and compositional analysis may be of some use to non-violinists who are interested in the music of these composers, as well.

The project presents studies by twenty-two different composers from Germany, Belgium, Italy, America, Greece, Slovenia, Croatia, Russia, Switzerland, and Austria. Of the one hundred and sixty-nine etudes included, seventy-six are analyzed individually. The works cover most of the major stylistic trends of the twentieth century and span the years 1926-1993. The information is mostly pragmatic in nature and is easily adopted into the daily teaching and practicing routine of the violinist. More importantly, it intends to open violinists to the notion of preparing for the repertoire of the twentieth century with the same standard of excellence that has been applied to the repertoire of the previous two centuries.

INTRODUCTION

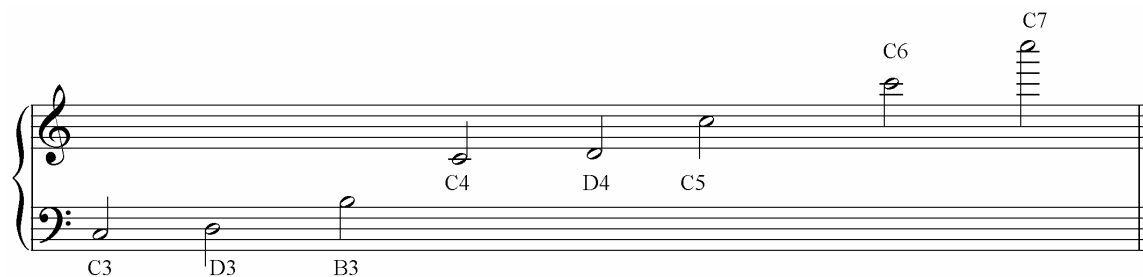
The purpose of this paper is to create a partial catalogue of violin etudes from the twentieth century; the studies will be analyzed individually (except where otherwise noted) according to their musical, compositional, and pedagogical content. The performance analysis will expound on the contents (facts about intervals, bow strokes, extended instrumental techniques, etc.), the technical challenges (for the left and right hands, the ear, and the mind), and the musical requirements (phrasing, expression, etc.) set forth in the study. The musical and compositional analysis concerns the style, the harmonic, melodic, rhythmic, and metric language, as well as the phrase structure and formal design of the etude.

Each appearance of a new composer in the document (sometimes, but not always, at the beginning of a chapter) is followed by a brief biography. The information provided here is historical and generally analytical and relates to the composer's background (studies, teachers, positions, et al.), influences (upon his music), and style. A list of solo and chamber works featuring the violin appears at the end of this section. Following the short composer biography and works list at the beginning of the chapter is a section entitled "general remarks about the collection," which will provide useful information about the collection as a whole. (If an etude does not belong to a collection of at least four, then no "general remarks" section will be included.) All types of information (performance, compositional, and historical) are intended for violin teachers, students, and professionals as a guide first for choosing etudes to suit a particular purpose and, later, for more expeditious learning of, and benefit from the work on, the study. Practice

time will be more effective if the violinist approaches the etude with a better understanding of its contents, style, structure, challenges and intended purpose.

Terminology, Symbols, Notation and History

Throughout the document various terms, symbols, and descriptive notations are used which are not universally standardized and may be unfamiliar to some readers. The register notation used comes from the National Acoustic Society. In this notational system, “middle C” is C4. Thus, the D, which is a whole step above C4 (“middle C”), is notated as D4, and the C, which is an octave above C4, is listed as C5, and so on. See example 1, below. This notation is generally used only when more than one of the same pitch (F for example) appears within a single measure, thus causing some possible confusion when reference is made to the “F” in a certain measure. Unless it appears at the beginning of a sentence, measure is abbreviated as “m.” (“mm.,” for more than one). With respect to intervals, the following abbreviations are used: “P” for perfect, “M” for major, and “m” for minor. Therefore, P5ths are perfect fifths, M3rds are major thirds, and m7ths are minor sevenths. Also, in pieces that are without meter, other means must be used to draw attention to a particular detail in the score. In this case, line (or system) numbers are referred to with, or without, page numbers. Therefore, “p. 3, line 2” refers to the second line on the third page of actual music (not including title pages and preface material in the edition).



Ex. 1. Register notation

Throughout the document, many etudes make use of chords, third-based (tertian) harmonies, and traditional melodic collections. These may be described as “C major” or “d minor” collections or harmonies, but what is meant is not the tonality of C major or d minor (with functional harmonic progressions). The label, in this case, refers to an isolated piece of tertian material or a harmonic centrality. The label of “d minor” effectively describes the harmonic or melodic content and relates post-tonal materials to the tonal system from which they originate. Thus, within a particular study, a chord or collection of pitches may be described as “C major” for convenience, but the reader should understand that the passage or study is not in the key of C major unless such a description is explicitly stated.

Likewise, synthetic asymmetrical collections such as anhemitonic pentatonic, and symmetrical ones such as whole tone, and octatonic scales, are labeled for differentiation throughout the document, though these collections do not function diatonically. Therefore, C pentatonic consists of the pitches C-D-E-G-A, where C is not a tonic or root. The two transpositions of the whole tone scale are classified as C whole tone and C# whole tone. The three transpositions of the octatonic scale are labeled C, C#, and D-flat, where C and C# begin with a M2nd and D-flat begins with a m2nd. For examples of these synthetic collections, refer to Appendix A.

The theoretical analysis of the expressionist-style studies (atonal and twelve-tone) contains many symbols and terms, which may be unknown to some readers. The lack of functionality creates enharmonic equivalence, whereby E# is the same as F, and so on. Thus, pitches are described as pitch classes and intervals as interval classes. Inversional equivalence in this music allows interval classes to represent a family of intervals.

Therefore, interval class 1 represents a m2nd and a M7th; interval class 5 represents a P4th and a P5th (interval class 2 represents a M2nd/m7th, interval class 3 a m3rd/M6th, interval class 4 a M3rd/m6th, and interval class 6, the tritone, has no pair except itself). If a passage or piece is said to emphasize interval class 5, then P4ths and P5ths will be present on the surface of the music (melodically and harmonically). However, this emphasis may be subtle or elusive in some cases, since groups of pitch classes are analyzed together in this music. Thus, a melodic collection such as (C#, G, B-flat, D) may be used to illustrate an emphasis on interval classes 1 and 5 even though interval class 1 (C#-D) and interval class 5 (G-D) are separated aurally by another note(s).

The (C#, G, B-flat, D) collection may also be described as an [0147] (four note) tetrachord. In many cases, the pitches must be reordered before the set can be determined. To put it simply, sets represent the intervallic content of a collection of pitches, and this series of intervals is presented in the most compact form possible. Compactness is sometimes difficult to determine; the first interval considered is the largest (between the first and last pitch classes) and is followed by the smallest. In this particular case the notes are reordered (G, B-flat, C#, D) and read backwards. Each of the numbers represents an interval class: D = 0 (the interval between D and itself), C# = 1 (the m2nd between D and C#), B-flat = 4 (the M3rd between D and B-flat), and G = 7 (the P5th between D and G). With this information, the reader should be able to understand the text and extract information from it. However, the topic is too complicated to explain in detail here, so those wishing to probe it further should refer to Joseph N. Strauss's Post-Tonal Theory (1990).

Twelve-tone analysis is also a large topic requiring more space than what is available in this document. However, a few comments may prove useful. In strict twelve-tone compositions the original row is considered to be in the Prime form, and from this original, a matrix of rows is formed. The Prime form is transposed to all twelve pitch classes and subjected to retrograde, inversion and retrograde inversion operations to produce a total of forty-eight possible row forms within the matrix.

Rows are labeled using a kind of fixed-*do* system. P stands for prime form, I for inversion, R for retrograde, and RI for retrograde inversion. Therefore, the chromatic scale (C, C#, D, D#, E, F, F#, G, G#, A, B-flat, B) could be labeled as P_0 , where 0 represents the pitch class C. By reading the pitch classes backwards (B, B-flat, A, G#, G, F#, F, E, D#, D, C#, C) the row R_{11} is formed, where 11 stands for the eleventh pitch class B-natural.¹ The inversion form I_0 is created by starting on C and using the same intervals as P_0 in the opposite direction (C, B, B-flat, A, G#, G, F#, F, E, D#, D, C#). The retrograde form RI_1 would contain the same pitch class order as I_0 read backwards (C#, D, D#, E, F, F#, G, G#, A, B-flat, B, C). In this style, pitch classes may appear in any register and with direct repetition. In RI_1 , for instance, the row will begin with C#. However, several D-naturals might be repeated before the D# appears. However, indirect repetitions are not allowed, so once D# is reached the D and C# may not be used again until the row has been completed.

The words *etude*, *study*, *caprice*, and *prelude* are used somewhat interchangeably throughout this document. In particular, the word *etude* (*étude*) is simply the French word

¹ Some texts describe row forms in relation to the original P form. Thus, reading P_0 backwards would produce the row R_0 . However, in this document the direction and starting pitch determine the label so that R_0 would begin on the pitch class C.

for study. Caprice (from the Italian capriccio) has a slightly more complex musical lineage. The term was used in the eighteenth century to describe pieces or passages that were virtuosic and improvisatory (capricious) in character. In the nineteenth century, caprice came to be used as a particular type of virtuosic, and musically satisfying, study. “[Rodolphe] Kreutzer, a leader of that renowned school of violin-playing which originated in Italy, and was further developed in France by Viotti, Baillot, Rode, and himself, gave to posterity, in these ’42 Études ou Caprices pour le Violon,’ a work which still of right occupies a prominent place in every course of violin-training—which is, in fact, a classic in its province, and indispensable in laying a firm foundation for violin-technique, and as a preparation for the more difficult ’24 Caprices’ by Rode.”² Further examples of the interchangeability of these terms may be observed through titles like Jacob Don’t’s Etüden und Capricen, op. 35, Henri Wieniawski’s Ecole Moderne: Etudes-Caprices, op. 10 and Nicolo Paganini’s 24 Caprices, op. 1, all for solo violin.

Paganini’s op. 1, in particular, set a new standard of virtuosity and technical brilliance on the instrument and inspired many other Romantic composers. Paganini’s expansion of violin-playing technique and of the sonic possibilities of the instrument influenced Liszt and Chopin to do the same for the piano. Also, his expressive and inventive musical characters, and the 24th Caprice in a minor, in particular, inspired many compositions and variations by Liszt, Schumann, Brahms, Rachmaninoff, Lutosławski, and others. Even later composers of violin etudes acknowledge the influence of Paganini. Eugene Ysaÿe, whose Dix Preludes, op. 35 are presented in this document, writes:

² Rodolphe Kreutzer, Forty-Two Studies or Caprices for the Violin, with a Biographical Sketch of the Author by Dr. Theodore Baker (New York: G. Schirmer, Inc., 1923), 2.

Paganini, the searcher, the inventor of a special technique, follows the evolution of the lyrical Italian music of this time and builds up on a harmony generally consonant an entirely new system, using with prodigious ability rapid successions of thirds, fingered octaves and tenths in double stops....

...To those who loudly proclaimed that Paganini was unplayable with ordinary hands, it has been proved that study, will-power and patience can overcome the most arduous difficulties, this more on account of their novelty rather than their actual difficulty.

The same may be said of Ysaÿe's Preludes and many other challenging studies appearing in this document. Many violinists will be intimidated by issues such as unfamiliar notation, unusual ways of playing the instrument, and the absence of traditional tonal language, form and procedure. However, with intelligent, purposeful practice, the players will discover that much of what is required in these etudes is not exceedingly difficult once the novelty is overcome.

How to Use this Guide to Find an Etude or Collection of Etudes

The chapters are organized (as chronologically as possible) by composer (and collection) with specific technical problems or stylistic issues listed in the index. To locate, for instance, an etude with octatonic collections, simply look up "octatonic" in the index and search the listed page numbers dealing with this topic. The forms are used to assimilate information about etudes quickly. Therefore, after several etudes with octatonic collections have been located through the index search, the forms may be glanced at for comparison. For instance, examination of the forms may reveal that one of the etudes features synthetic collections like the octatonic prominently while others do not, or one etude may be rated under "level of difficulty" to be advanced while another is easy. Once the most important determining factors have been assessed and compared, the player or teacher can decide which etude will likely be the most useful. If, after searching

the library, the etude or collection is not found, then Appendix B (List of Publishers) can be consulted to find the publisher of the etude(s) for purchasing purposes. If one is interested in purchasing, or checking out of a library, a full collection, then a search by chapter will be effective.

General Remarks about the Composers of the Studies

The composers represented vary from one another considerably in that some (like Samuel Adler) are non-violinist composers, while others (like Eugene Ysaÿe) are violinists and pedagogues who also compose. Obviously, etudes composed by violinists will contain passages that (though they may be difficult and virtuosic) will lie well on the instrument, while those by non-violinists will tend to be less idiomatic. On the other hand, those by non-violinist composers are often very musical and well-crafted, compositionally. (Studies written by pedagogues of the twentieth century, such as Ivan Galamian, which represent an attempt to standardize, improve, or supplement the work of eighteenth- and nineteenth-century pedagogues, will not be discussed in this document.) This translates into collections of studies that vary considerably from one another. Studies written by violinist/pedagogues tend to be similar to past models like Kreutzer's Forty-Two Studies or Caprices for the violin, which present a technical problem and work through it systematically and rigorously. The collections by Ysaÿe, and (interestingly) Hindemith, are of this kind. Conversely, studies by non-violinist composers tend to be more musical; technical issues present themselves sporadically, and not for their own sake, but as a consequence of the musical statements. The latter type often falls into those categories of works (like the nineteenth-century etudes of Heinrich Wilhelm Ernst) which can be performed on stage or learned as a study, only. The

collections by George Rochberg, Bruno Bartolozzi, Hans Werner Henze, Earl Kim, and many in the Pro Musica Nova collection are of this type. Those by Samuel Adler and Dinos Constantinides maintain a fairly even balance between pedagogical and musical spheres. In some cases, the etudes seem to be for the composer himself as much as the violinists. They provide an opportunity to “study” and perfect the craft of composing. Béla Bartók’s 44 Duos for two violins were written to fulfill a pedagogical purpose but ended up being as much of an etude for the composer himself (in terms of incorporating his collections of folk- and ethnomusicological materials into twentieth-century harmonic, rhythmic and formal procedures) as for violinists. At any rate, the studies presented in this document are all unique in terms of what material they offer and how they offer it.

Contents and Analysis

The information presented is diverse because it reflects the dual purpose of the document—that is, to function as a partial catalogue and as a practice guide. Much of this information will be of a factual nature, as one would expect from a catalogue; revealed in this information will be the contents of the study, including composer, title, style, meter used (if any), and so forth. Besides being a partial catalogue, this work will provide an in-depth analysis of each study, except where otherwise noted. In the interest of space, the collections by John Cage, Rochberg, and Ysaÿe are analyzed more generally and without tables for each study. The analysis for all of the studies will concentrate on technical and musical issues relating to violin playing. Practicing suggestions and hints will be given in some cases, along with fingering and bowing possibilities. Information regarding listening, observation, and potential hazards and pitfalls will also be addressed. The

theoretical analysis (under “style”) will generally concentrate on the harmonic/melodic vocabulary of the composer. This information is of potential use those who are interested in that composer’s music and to the violinist, who will surely benefit from a deeper understanding of the study.

Categories within the Forms

As alluded to above, the chapters will be laid out as follows: a brief composer biography (including works with violin); general discussion of the collection; a series of tables followed by text giving violinistic and theoretical insight, and analysis (and in some cases, specific examples of literature or composers that relate to the study). The tables allow for fast reference and evaluation of a particular study, while the text that follows elaborates on the contents of the forms. In this way, one will avoid the necessity of reading endless prose in order to determine if the study in question will suit his/her needs. The text gives further detail and insight, which will be of use when choosing between studies and later as an aid to effective and efficient practice. The information will be presented in a table, as shown below. (If a category is left blank in a table, then the reader may assume that this aspect of the piece is inconsequential or too easy to warrant discussion.)

Composer	
Title	
Style	
Level of difficulty	
Left hand difficulty	
Right hand difficulty	
Other difficulties	
Value	
Musicality	
Meter	
Tempo	
Rhythmic difficulty	

Most of the categories are self-explanatory, but a few of them are subjective enough to require some elaboration.

“Style” refers to the harmonic and melodic language (i.e., atonal, twelve-tone, etc.) and to specific historical trends of the twentieth century (i.e. neo-Classical, Modernism, etc.). This category is complicated because standard terminology does not exist to describe all styles. In some cases, as with “atonal” and “expressionism,” or “twelve-tone,” “dodecaphonic,” and “serial,” several terms may overlap in meaning. In addition, some pieces are not stylistically consistent unto themselves, and the interpretation of disparate elements may lead to several potential conclusions. For these reasons, the “style” category can be slightly ambiguous. Within the table the reader may see several terms listed in this category (and not always similar, or compatible, ones), but apparent contradictions and ambiguities are usually explained in the text below.

The reader should understand that the “Level of difficulty” category of the analysis of each etude is by far the most subjective. In the first place, each person who reads this guide will be at a different playing level, and more importantly, a different playing level from me—the person making these judgments. Secondly, even players who come to this text at a similar level to me will undoubtedly have different strengths and weaknesses in their playing and in their musical training. For example, one player may be adept at feeling complex rhythmic and metric changes but less adept at hearing the intonation of unusual scales, whereas another player at a similar technical and musical level may lack rhythmic skill but possess excellent ear training. The first student might find that an etude focusing on rhythm is “easy” while the second student may find this

same etude “advanced.” For this reason, I have decided to set forth (in order of greatest to least importance) some guidelines, which may be useful to teachers and students.

The “level of difficulty” of each etude is based on technique—left hand (especially) and right hand, other difficulties (ear training, mental challenges, and coordination) and rhythm and meter. Technique is the most important criterion because no amount of hearing or rhythmic ability will help a player that does not yet possess enough skill to play the notes accurately, in a consistent tempo, and with a good sound. To play the notes well technically should take some work and effort if player and study are matched appropriately. (Many of us have studied Paganini’s 24 Capriccios, Op.1, but who among us can read them perfectly at sight?) The second criterion is “ear training,” and the decision to place it ahead of “rhythm and meter” is not arbitrary. In my opinion, the training of the mind to hear correctly is a more complex and mysterious process than learning to feel and understand rhythms. (As stated earlier, some players will find the opposite to be true.) Rhythms can be intellectualized mathematically, but even people who find no comfort in this (!) often find comfort in the idea that rhythms can often be learned and felt physically and with the help of a metronome. The training of the ear is more elusive because the only way to externalize it (make it physical) is to sing pitches while playing them on a keyboard. With ear training, unlike rhythmic training, things generally do not “click” and fall into place—more often, the learning process is a gradual one.

Once these criteria have been assessed individually, the information will be synthesized into a ranking of “easy,” “intermediate” or “advanced.” An etude classified as “advanced” will usually present significant challenges in at least two categories,

especially the technical. An “easy” etude will generally be playable within the first four or five positions on the violin, and will be somewhat conservative in its exploration of twentieth-century pitch and rhythmic language. Everything else will fall under “intermediate.” Additionally, we sometimes learn etudes that are not at the exact level of our abilities. We may use an etude that is slightly beyond our level in order to expand our technique. Contrarily, we may also use etudes that are below our level in order to work on something specific while taking advantage of the technical simplicity of the writing. (Very often, advanced players will use simple Ševčík, Schradieck and Kreutzer studies to stay in shape or perfect a certain aspect of technique.)

The “value” of each etude is also based on a subjective opinion. “Value” is not the same as “musicality,” and neither is a judgment. “Value” simply indicates some of the benefits one can get out of studying this particular etude. The information will have nothing to do with whether or not the piece is composed well, but rather will show the most important contents and possibly give hints about the purpose behind the etude (for example, improving one’s mastery of mixed meter or dissonant intervals). “Musicality” concerns phrasing and formal structure, musical details and emotional requirements. Some of these issues are assessable simply by looking at the score. However, in some cases (like Earl Kim’s 12 Caprices for Solo Violin) the composer intentionally leaves more freedom of interpretation up to the performer. Much depends on the style of music as well.

Expressionist-style works and eclectic works tend to be saturated with musical and emotional details and fragmented phrases, whereas post-modern minimalist works tend to be spare with regard to musical indications and more continuous in phrasing

structure. Works in all of these styles can be equally musical, but the minimalist-style etude will have different musical and phrasing requirements and challenges. This information is pertinent because a teacher may decide that certain etudes will inspire, while others will allow students to keep a “cool head” during the learning process. For some students a “dry” study (like those of Ševčík and Schradieck) is ideal since it allows focused, concentrated, intellectual work to occur without the distraction and physical tension that sometimes accompany one’s attempt to play expressively and energetically. The “musicality” category is a guideline only, and is intended to be helpful. In the end, the player must choose the most effective way to practice in a given situation. To make a technical study expressive requires only imagination; to make an intensely musical study dry requires only the will to step back and solve a technical problem with patience and calm.

ANALYSIS OF COMPOSERS AND STUDIES

Hindemith, Paul

Übungen für Geiger (Studies for Violinists, 1926)

Composer Biography

Paul Hindemith (b Hanau, 16 Nov 1895; d Frankfurt, 28 Dec 1963) was the foremost German composer of his generation. Important as a theorist, teacher, violist and conductor, he was a figure central to both music composition and musical thought during the first half of the twentieth century. Hindemith's output is diverse, partially because of the variety of sources used for inspiration. This eclectic list of sources includes expressionism (gestures, phrasing, and chromatic language), Baroque formal models and contrapuntal devices (including fugues, chaconnes, passacaglias, pedal points, large-scale chromatic motion, and contrapuntal textures), popular idioms (jazz, popular dances like foxtrots, and cabaret music), and noise effects (sirens and other more traditional effects), to name a few.³

His harmonic language is sometimes described by the term abstract chromaticism (a term that seems to be a paraphrase of abstract expressionism in paintings such as those by Jackson Pollock).⁴ Although the movement in painting is from after 1945, the term is nevertheless apt, since Hindemith's language often embraces the ideal of variety without the structure and invariance of Schoenbergian serialism. This revolt away from Germanic expressionism is also evident in the sometimes emotionally reserved or mechanized quality in his music and a natural tendency towards rhythmic repetition. Hindemith is

³ Ian Kemp, The New Grove Modern Masters: Bartók, Stravinsky, Hindemith (New York: W. W. Norton & Company, 1984), 243.

⁴ Stanlie Sadie, ed., The New Grove Dictionary of Music and Musicians, 2nd ed. (London: Macmillan Publishers Limited, 2001). Most of the information in the "composer biography" sections of the document comes from The New Grove Dictionary of Music and Musicians, except where otherwise noted.

famous for his *Gebrauchsmusik* (music for amateur players), for a collection of sonatas for almost every instrument, and for a tremendous output of well crafted compositions in many genres.

Works with Violin

Concerto, vn. chmb. orch(1920); Kammermusik no. 4 (Vn Conc.), vn, large chmb. orch.(1925); Violin Concerto(1939); Str Qt no.1, f (1919); Str Qt no.2, C(1921); Str Qt no.3(1922); Str Qt no.4(1923); Str Trio no.1(1924); Three Pieces, cl, tpt, pf, vn, db(1925); Str Trio no.2(1933); Quartet, cl, pf trio(1938); Str Qt no.5, E-flat(1943); Str Qt no.6(1945); Octet, cl, bn, hn, vn, 2 va, vc, db(1957-8); Sonata, E-flat, vn, pf(1918); Sonata, D, vn, pf(1918); Sonata, solo vn(1924); Sonata, solo vn(1924); Zwei kanonische Duette, 2 vn(1929); Vierzehn leichte Stück, 2 vn(1931); Sonata, E, vn, pf(1935); Meditation [from *Nobilissima visione*], vn/va/vc, pf(1938); Sonata, C, vn, pf(1939)⁵

General Remarks about the Collection

In Hindemith's introduction to Übungen für Geiger (Studies for Violinists), he admits that the studies are not well-developed from a musical point of view but are valuable as a source of technical challenges for violinists, which are unusual and specific to modern music (for 1926). Hindemith writes, "...after close scrutiny, I found them [Übungen für Geiger] worthy of publication—certainly not with regard to their musical value (which seems slight), but because of the problems of fingering and bowing they present to the violinist. In condensed form, he is offered much that may facilitate his performance of modern solo, chamber music, and orchestral parts."⁶ However, the studies

⁵ "List of works with violin" for most of the composers in this document is extracted from The New Grove Dictionary of Music and Musicians, and the abbreviations used are consistent with those used in New Grove.

⁶ Paul Hindemith, Übungen für Geiger, (Mainz: Schott, 1967), 3.

are in a typical style for this period of Hindemith's work. The studies, in fact, bear some similarities to certain movements from his other works, particularly the sonatas for violin and piano and violin unaccompanied (refer to works list above). Thus, these studies might be described as 'technical puzzles,' with the qualification that the musicality is left up to the performer. One may use them as dry studies (like Ševčík), for working out the technical problems, or choose to add phrasing, nuances, dynamics and so on, according to one's own taste and imagination.

The studies are most progressive in their treatment of rhythm, melody and harmony; this translates into a concentration on the training of the ear and the left hand. The right hand is challenged in several studies, but more in traditional terms. Various types of string crossings, double stops and chords, and a limited variety of articulations are presented in Study III (string crossings with the wrist and arm in long slurs), Study IV (string crossings with arpeggiated slurs), and Study II (triple stops). The work dates from 1926, and is, not surprisingly, devoid of twentieth-century effects and extended performance techniques. The ear is challenged in all of the studies by unusual intervals, a lack of tonal center, and by the abundance of chromaticism with unusual patterns and/or an intentional sense of randomness. The rhythmic work essentially takes place with the difficult ties and subdivisions of Study II, which is also the most interesting, musically. Hindemith was a violinist/violist himself, and with regard to left hand work he refers to "toying with technical puzzles of that kind" during this time of his life.⁷

The 'technical puzzles' often involve a left hand technique which some teachers call "crawling." Crawling is a way to describe moving up and down the fingerboard from position to position with finger reinterpretations and/or extensions, rather than literal

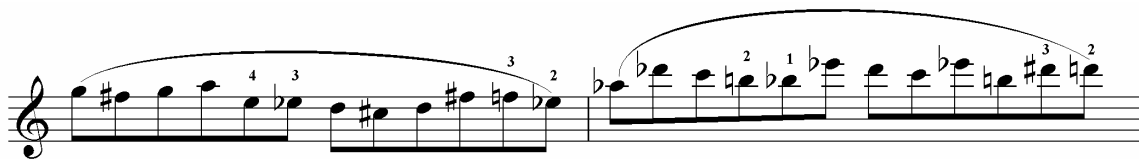
⁷ Hindemith, 3.

shifts (slides with the whole hand). For example, in m. 1 of Study I, the third finger plays E-flat in first position, but the hand creeps forward to play D and C# with the second and first fingers and is suddenly in second position. Study V is a culmination of the left hand procedures in double stops and uses crawling, extensions, small shifts, and expansion and contraction to the framework of the hand.

The third-based (tertian) harmonic language bears some connection to the tonal system of the past, but accidentals constantly change as one harmonic fragment morphs into another before establishing itself. These rapid changes of harmony are unexpected by the ear and left hand since they first appear as something familiar. Left hand preparations are essential for good intonation in this highly chromatic writing, but before playing a passage well one must first be able to hear it properly. Passages should be on the piano, then slowly on the violin. The sustain pedal may be used except when the intervals are too small and/or cacophonous. Of course, traditional methods, like checking individual notes against open strings when the result is a perfect interval, are also possible.

Composer	Hindemith, Paul.
Title	I: Ohne Lagenwechsel durch die Lagen (shifts without changes of position)
Style	Free atonal; abstract chromaticism
Level of difficulty	Intermediate
Left hand difficulty	“Crawling” technique to change positions subtly; Intervals: melodic P4ths
Right hand difficulty	
Other difficulties	Ear training for free atonal language
Value	Very good study of 20th-century passagework using abstract chromaticism; crawling technique; ear training; and sight-reading
Musicality	Accents and tenutos should be emphasized with weight and vibrato to show contrapuntal motion and hemiola (m. 8)
Meter	None given (mostly 12/8); ♩ = ♩
Tempo	Sehr lebhaft (very lively, spirited) (dotted half = 92)
Rhythmic difficulty	Simple; motoric ♩

Left hand difficulty: This study contains only four true shifts of position, all preceded by an open string. The “technical puzzle” here involves the crawling technique, which is used to move silently from one position to another. Subtle shifts are performed using chromatic half steps, usually to reinterpret a finger as belonging in a new position. In mm. 1-2, the player moves from first to fifth position without any true shifts in which the entire hand is moved as one unit. See example 2 below.



Other difficulties: Ear training is problematic for the fast chromatic turnover, or abstract chromaticism. Melodic P4ths can be practiced as double stops (as in mm 22-27), and open strings may be used (as in mm. 11, 13, 39, 41, E5s against open E) to check the accuracy of pitches which are related by perfect consonance (unison, P8ve, P4th, P5th). For notes that do not ring with as many overtones and notes that cannot be tuned against open strings, the use of a piano and/or tuner is advised. Electronic tuners have been in use by woodwind players for many years now but are just beginning to be utilized by string players and teachers. The tuner is an invaluable tool because of its infallibility and because it removes the uncertainty of the ear's ability to evaluate pitches precisely. Of course, the ear must eventually learn to hear precisely on its own, and, with consistent

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practice with the tuner, it will. As with all intonation work, avoid making constant adjustments. Play a note and hold it; then look at the tuner to check its precision. Next, make any necessary adjustment until the pitch is centered on the tuner; then lift the finger(s) and reset. Only when the muscles and the ear are able to find several pitches directly (without adjustments) should the sequence be repeated and reinforced.

Work with a piano is also extremely valuable, though it requires the player to compare pitches between the piano and the violin accurately. The piano is also most useful when harmonies can be held with the sustain pedal. In the present study, the setting is, unfortunately, monophonic, and, therefore, the method of practicing will have to be different. Begin by playing not more than six notes (in this particular study) on the piano, and then play them on the violin in a moderate tempo (quarter = ca 66). Then increase the size of the groups to twelve, concentrating on relationships between pitches. For example, in m. 1, listen for the consistency of repeated G5's and D5's and tune the G-D P4th as a double stop. Some advice about intonation work is necessary at this point to facilitate effective and efficient practice.

With intonation work, always remember the importance of playing with a good quality of sound. The bow should not be allowed to slide lightly across the surface of the strings, but should rather sink into the strings with a compact, resonant tone. Use long bows and resist the urge to change bows rapidly and nervously on a single note, since each bow change alters the pitch briefly. Also, avoid making frequent adjustments in the left fingers. Drop the finger from the base knuckle of the hand, and make, if necessary, one adjustment to fix the pitch; then lift the finger and drop it, keeping the adjustment in mind. The basics of left hand technique, such as proper hand position, the relaxation of

certain muscles, and preparations, are, needless to say, extremely important to the success of the player's work.

Composer	Hindemith, Paul.
Title	II: Gewandheit des Bogens bei rhythmischem Wechsel; Diese Übung spielt man am besten mit Zuhilfenahme eines Metronoms (fluency of the bow with rhythmic changes; studies with a metronome)
Style	Post-tonal
Level of difficulty	Advanced
Left hand difficulty	Successive shifts and extensions; successive double stops; intervals: M7ths, P4ths
Right hand difficulty	String crossings; chords (3 and 4 note)
Other difficulties	
Value	Complex rhythmic training with metronome; left hand and ear training work with “mutating” scales; diminished octaves and P4ths (melodic and harmonic)
Musicality	Traditional phrasing; bring out accents and tenuto's to emphasize gestures, also staccato notes for articulation contrast
Meter	Mostly 6/8; ♩ = ♩
Tempo	Mäßig bewegte Achtel (move ♩ tempo moderately)(♩ = etwa 84)
Rhythmic difficulty	Complex; eighths, sixteenths, thirty-seconds, and sixty-fourths with triplets, quintuplets and septuplets

Style: The harmonies are both tertian and quartal (m. 1), and melodic material is made from “tonal” and chromatic fragments which are in a state of constant change. The formal structure of the piece is illustrated in example 3.

A	B	A'
mm. 1-10	11-21	22-30

Ex. 3. Form chart

Left hand difficulty: Rapid scales and passages often start out on a particular harmony, only to change accidentals in the middle, causing a mutation of the collection. This procedure makes great demands on the ear as well as the left hand, which must adjust *before* the mutation even occurs. A multitude of diminished octaves and M7ths

cause constricted or extended hand positions, depending on the fingering. If the interval is played with the first and third fingers, then the hand will be in an extended position. If the first and fourth fingers are used, then the hand will be contracted (and will feel slightly squished or cramped). Melodic and harmonic P4ths also occur with great frequency and are difficult for intonation. Passages containing successive shifts and extensions (mm. 13-14, 17, 21) and successive double stops (mm. 18-19, 21) require the crawling technique of Study I and are also difficult for intonation. In particular, expansions and contractions of the hand must be prepared in advance and without altering the intonation of the note that is being held.

Musicality: This is the most interesting of the five studies from a musical standpoint. Many phrases and gestures should be played with direction leading up to the high points of the line (for example, m. 4 to the downbeat of m. 5). Direction in phrasing (sometimes called leading) is the act of playing a note, or group of notes, on the front part of the beat (that is, playing at the beginning of a pulse, and without rushing, rather than at the end of a perceived pulse) and with a slight sense of crescendo leading to an arrival point. Since many of the etudes in this collection are with a similar musicality, traditional phrasing from now on should be understood as a realization of the dynamic shapes and a giving of direction where appropriate.

Rhythm and meter: As the title suggests, rhythm is of the utmost importance in this study, and the use of a metronome is an essential tool in the player's work. Players would be wise to begin with a slower tempo, perhaps even setting the metronome to a sixteenth note pulse. This advice to practice with a metronome is given often throughout this document for various rhythmically challenging studies but should not be viewed as a

convenient, or standard, solution to a more complex problem. Often, the metronome by itself may not be enough to learn complex rhythms. However, its importance for all types of practicing and all genres cannot be understated. The infallibility of the machine is a blessing since it removes guesswork; thus, the player can use the metronome to learn to play evenly and to resist the temptation to take extra time when playing a difficult passage. The player must begin with the premise that the metronome is mathematically perfect and categorically correct. From there, s/he must make a personal commitment to play exactly together with this perfect “chamber music partner.”

The process of learning complex rhythms varies from player to player, but certain truths are universal. Rhythm, in folk music throughout the world, is connected to the human heartbeat, to verbal speech patterns, and especially to movement, expressed often in dance. Therefore, rhythm is best learned through a dual approach of physical feeling and intellectual understanding. The intellectual aspect involves understanding the beat subdivisions, which determine how all of the small and large units relate to the basic pulse and to each other. The physical aspect requires the player to feel the pulse like a continuous, unchanging entity and then feel the interaction of specific rhythms within this beat. This part of the learning should be literally physical, like watching the body movements of a dancer or drumming ensemble. Thus, the player should use the body itself as a learning tool by moving with the pulse (walking, conducting, gesturing, clapping, etc.) and by internalizing rhythms with external movements (i.e. verbalizing and tapping out patterns).

The learning process will not be complete until the physical and mental aspects are integrated. (For more information about this topic see [Brain Gym: Simple Activities](#)

for Whole Brain Learning by Dr. Paul E. Dennison and Gail E. Dennison (1998), an educational workbook about whole brain learning and educational kinesthetics for teachers of children.) The integration can be accomplished by a variety of means, but, generally the player should begin (without the instrument) to combine several different tasks one by one. Rhythms should interact against a specific pulse through different combinations of verbalization on a syllable, conducting patterns, walking, clapping and tapping.

In the opening of the Hindemith study, for instance, a generic syllable like “da” may be used to verbalize each rhythm while conducting and/or tapping the eighth or sixteenth note pulse. (The use of conducting patterns is important to the learning process, since this adds immediate metric understanding.) Also, for more information about rhythmic syllables and rhythmic solfège systems refer to the article “Takadimi: A Beat Oriented System of Rhythmic Pedagogy.”⁹ Another combination would be to walk in place on the eighth note pulse and tap out the given rhythm; then, walk eighth notes, clap sixteenths and verbalize the given rhythms on syllables.

For passages like mm. 11-13 and 15-20 frustration can be avoided if the player removes all of the ties at the beginning of the learning process. Simplifying the rhythm in this way will be enormously helpful, and the ties are easily added later with the assistance of a metronome. Mental work of this kind will save time and energy. In general, the player must become comfortable with these complex rhythms before practicing with the instrument. Attempting to learn the rhythms on the instrument simultaneously with the

⁹ Richard Hoffman, John White, and William Peltó, “Takadimi: A Beat Oriented System of Rhythmic Pedagogy,” *Journal of Music Theory Pedagogy* 10 (1996) : 7-30.

technical work of the right and left hands will likely be overwhelming, frustrating, and inefficient.

Composer	Hindemith, Paul.
Title	III: Saitenwechsel (string crossings)
Style	Post-tonal, polyphonic
Level of difficulty	Advanced; awkward string crossings, difficult left hand stretches, intonation
Left hand difficulty	Intervals: octaves, unisons, some 7ths and 2nds; extensions
Right hand difficulty	String crossings; small wrist movements across 2, 3 strings (over long slurs)
Other difficulties	Coordination
Value	Flexibility and control from both hands; evenness within complex slurred passages
Musicality	
Meter	None given; (12/8, 18/8 and 24/8); ♩ = ♩
Tempo	Langsam (slow) (dotted quarter etwa 66)
Rhythmic difficulty	Simple

Style: Pedal tones within this polyphonic style create long passages of static harmony, contrasted with chromatic motion in the highest voice. A chromatic ascent from A to a local climax A (mm. 20-23) and descent from A to B (mm. 23-27) are examples of the former. The B natural in m. 27 marks the return to the A-section material (A') and the use of this pedal B continues until m. 34. The final return to the B pedal at “Etwas ruhiger” in m. 40 marks the beginning of the Coda of the study.

Left hand difficulty: Several unusual intervals predominate in the etude, including unisons, 7ths, and 2nds. Large intervals like unisons and chord settings exceeding an octave necessitate the use of extensions and a stretched hand position. When the hand is forced to remain in this stretched position for long periods, muscular tension develops and causes intonation problems. Practice the unisons and fingered octaves in double stops with long bows. Take several free-moving bows, in fact, to allow plenty of time for what dancers call “relaxing into the stretch.” Find the stretch, and then

relax the muscles of the hand as much as possible. Pay particular attention to the muscles in the back of the hand, the palm, and around the thumb. Also, take frequent practice breaks to avoid discomfort and/or injury.

Right hand difficulty: The string crossings in this study are particularly challenging because of the long slurs, the alternation between duple and treble rhythms, and the alternation between wrist and arm crossings. For string crossings between two strings, utilize the small wrist crossing. Move the hand from one string level to another and allow the wrist to bend; keep the level of the elbow unchanged and exactly between the two strings. Alternating with this type are crossings that traverse three strings consecutively. This second type should be performed by moving the whole arm from the shoulder. The arm moves as one unit, but students may find it useful to think of leading with the elbow when passing from low strings to high strings, and with the wrist when going from high to low strings. As children, we learn to change from one string level to another with angular movements, which we must unlearn later in favor of rounded, or elliptical, movements. The leading of the elbow in the arm crossing and the movement of the hand in the wrist crossing are designed to this purpose. See example 4, shown below.

Other difficulties: Avoid coordination accidents by studying when to lift fingers, when to place them early, and when to leave them down entirely. Refer to example 4 from mm. 4-6. (The small square on D# in m. 4 indicates the advance placement of the third finger.)

Value: The violinist should work for rhythmic evenness within the difficult string crossings. The placement of the left fingers, the knowledge of the distance between strings, the mastery of the arm and wrist crossings, and the execution of rounded, well-

timed crossings are all necessary for playing the study well. In addition, intonation is made challenging by the stretches in the left hand. However, this study is technically rewarding, since it increases left hand flexibility and right hand mastery and control.

Musicality: Good practicing brings fast and significant technical rewards, but this study is musically even more unforgiving and torturous than Paganini's Caprice Op. 1, No. 2. Take frequent breaks and combine this type of work with practice on musically satisfying repertoire.

The image shows a musical score for Exercise 4, consisting of four staves. The first staff is in treble clef and contains a sequence of eighth notes with various annotations: "1", "hold 2", "advance place 1", "hold 4", "advance place 3", and "1". There are also asterisks and labels for "wrist", "arm", and "arm" with arrows pointing to specific notes. The second staff is in treble clef and contains a sequence of eighth notes with annotations "0", "1", "0", "4", "4", "1", "4", and "4". The third staff is in treble clef and contains a sequence of eighth notes with annotations "4", "1", "2", "1", "4", "lift 2", and "lift 4". The fourth staff is in treble clef and contains a sequence of eighth notes with annotations "1", "3", "4", "1", "4", "1", "4", "2", "4", "1", "3", "1", "4", and "1".

Ex. 4. Wrist crossings, arm crossings, finger movements for coordination, mm. 4-6¹⁰

¹⁰ Hindemith Übungen für Geiger, © 1958 Schott Musik International, ©renewed. All Rights Reserved. Used by Permission of European American Music Distributors LLC, sole US and Canadian agent for Schott Musik International.

Composer	Hindemith, Paul.
Title	IV: Gebrochene Akkorde (broken chords)
Style	Post-tonal
Level of difficulty	Advanced
Left hand difficulty	Odd arpeggios with diminished octaves; high arpeggios with shifts, extensions and changing tonalities
Right hand difficulty	String crossings across 4 strings; bow distribution
Other difficulties	Ear training; changing tonalities
Value	Complex string crossings; ear training; left hand preparation
Musicality	
Meter	None; mostly 3/4; quarter remains constant
Tempo	Sehr lebhaft (very lively) (quarter = 152)
Rhythmic difficulty	Simple

Style: The study begins and ends on A-natural and uses chromatic, contrapuntal lines to emphasize this pitch center as well (ex. mm. 60-70). The harmonies created from the “Gebrochene Akkorde” (broken chords) are, like the arpeggios themselves, “mutations” of tonal fragments passing through chromatic and enharmonic changes.

Left hand difficulty: The broken chords are difficult because they are not chords in a tonal sense, but rather arpeggios with “mutations” like those in Study no. 2. Accidentals constantly change in the middle of arpeggios and create diminished or augmented octaves, which are difficult for the ear and the left hand setting. For example, m. 3 contains two diminished and two augmented octaves as a result of the alternations between B-flat and B-natural and D-flat, D-natural and D#. Again, quick timing and great flexibility of the fingers is required for the expansion and contraction of the hand position.

Right hand difficulty: The passage from mm. 67-70 should be played near the frog, with the separate note always on an up-bow to facilitate the large crossings. Bow

distribution in mm. 46-70, 90-93 and 102-108 is challenging because of the single separate note. When surrounded by small slurred groups (mm. 46-60), the staccato note can be played on a separate lifted bow. However, if the slurs are longer (mm. 61-66), then this note should be rearticulated (hooked) into the previous or subsequent arpeggio (either way will work). This circumvents the problem of bow distribution for the single separate note.

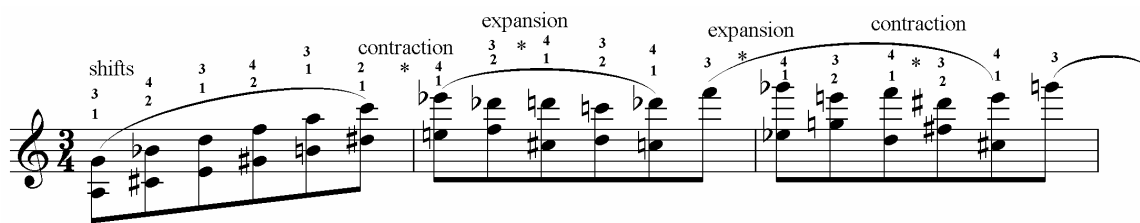
Value: Study IV is very effective for ear training, complex string crossings with slurred and separate notes, and especially for preparations (expansion, contraction, extensions, and shifts) in the left hand.

Musicality: Notes marked with tenuto should be given extra emphasis with weight and length in order to bring out the contrapuntal motion. Contrast between the gestures comes from the energetic emphasis at the beginning of various slurred groups. For instance, in m. 4, the duple rhythm should be strongly marked by bow speed.

Composer	Hindemith, Paul.
Title	V: Doppelgriffe und Saitenwechsel (double stops and string crossings)
Style	Post-tonal
Level of difficulty	Advanced
Left hand difficulty	Difficult double stops within slurs; chromatic double stops with changing accidentals; intervals: 3rds, 7ths, 6ths, octaves, 9ths, 10ths
Right hand difficulty	Long slurs of double stops; string crossings (across 4 strings)
Other difficulties	
Value	Double stops with “crawling,” small shifts, and chromaticism; ear training; connections in the double stops
Musicality	
Meter	3/4
Tempo	Mäßig schnelle Viertel (moderately fast quarter pulse) (quarter = 132)
Rhythmic difficulty	Simple

Style: In this study, not even contrapuntal devices can anchor the harmonic language. Hindemith is stretching the essentially tertian harmonies as far away from tonality as possible.

Left hand difficulty: Complex double stops within slurs create more difficulty for shifts and connections with constantly changing accidentals. Parallel M9ths are very unusual and make it difficult to maintain a good sense of melodic and harmonic intonation. The left hand work is challenging because successions of double stops must be connected through a variety of means: crawling between positions, performing small shifts, and contraction and expansion of the hand. Example 5, from mm. 9-11 illustrates all of these points.



Ex. 5. Crawling, small shifts, expansion and contraction of hand position, mm. 9-11¹¹

Value: The primary emphasis is on the training of the ear and the left hand. The left hand is written almost entirely in double stops (2nds, 4ths and 5ths are the only intervals missing) with rapidly changing accidentals, tonal centers, and abstract chromaticism. Small shifts, crawling, and contraction and expansion in the framework of the left hand compound the challenge placed on the violinist's sense for intonation.

Musicality: This should probably be used as a dry study for technical work until the performance tempo (quarter = 132) is nearly reached. Bow weight and vibrato speed can then give shape and special emphasis to the harmonic shifts.

¹¹ Hindemith *Übungen für Geiger*, © 1958 Schott Musik International, ©renewed. All Rights Reserved. Used by Permission of European American Music Distributors LLC, sole US and Canadian agent for Schott Musik International.

Ysaÿe, Eugène(-Auguste)

Dix Preludes, op.35 (1928? Published post.)

Composer Biography

Belgian violinist, conductor and composer Eugene Ysaÿe (b Liège, 16 July 1858; d Brussels, 12 May 1931) influenced several generations of violinists and wrote several works, which, due to their virtuosity, harmonic originality and contrapuntal foundation, remain an important part of the string repertory today. His principal teachers include Rodolphe Massart (Liege Conservatory, 1872-4), Henryk Wieniawski (Brussels), and Henry Vieuxtemps (Paris). His career as a soloist (beginning with concerts in Scandanavia, Russia, and Hungary) was initiated by the patronage of Anton Rubenstein. Engagements throughout Europe followed, as did a teaching appointment as the successor of Vieuxtemps at the Brussels Conservatory. He premiered many outstanding works that are dedicated to him, including: Franck's Violin Sonata (1886), Chausson's Concert (1889–91) and Poème (1896), d'Indy's First String Quartet (1890), Debussy's String Quartet (1893) and Lekeu's Violin Sonata (1892).

Ysaÿe belonged to the Franco-Belgian school, and broke from the tradition of Joachim, Wieniawski, Sarasate and Auer. He was an acknowledged virtuoso on the instrument, but placed sound quality, precision, and creative freedom before empty virtuosity. He chose to program strong works on his concerts (with the Ysaÿe Quartet and the Ysaÿe -Pugno Duo), which was unusual and progressive for the time. Late in his career, when his playing began to suffer from the effects of neuritis and diabetes, he turned to conducting. He brought modern French music to the Cincinnati Symphony Orchestra from 1918-22.

Ysaÿe also belonged to the tradition of virtuoso violinist composers, which began as far back as Biber and continued through Paganini to the generation of Wieniawski and Vieuxtemps (which immediately preceded Ysaÿe's). His music was virtuosic, but, as with his playing, not an end unto itself. His own artistic sensibilities and his association with the leading French composers of the time (Saint-Saëns, Fauré, Franck and Debussy), allowed him to "abandoned decorative virtuosity for an improvisatory, passionate character."⁹ His Six Sonatas for Violin Solo, op.27 and Sonata for Solo Cello, op.28 maintain this balance between virtuosity and harmonic ingenuity.

Works with Violin

Vn, orch: Poème élégiaque, op.12 (Leipzig, c1895); Scène au rouet, op.14; Caprice d'après l'Étude en forme de valse de Saint-Saëns (Paris, c1900); Chant d'hiver, op.15 (London, 1902); Extase, op.18; Berceuse, op.20; Les neiges d'antan, op.23; Divertimento, op.24; Fantasia, op.32; Concerto d'après deux poèmes, op. posth., ed. J. Ysaÿe; 8 concs., Suite, inc.: unpubd; Amitié, 2 vn, orch, op.26; Poème nocturne, vn, vc, orch, op.29; Harmonies du soir, str qt, str orch, op.31; Vn, pf: 2 Mazurkas, op.10 (c1893); Etude-poème, op. posth.; Saltarelle carnavalesque, 2 polonaises, Mazurka, Waltz, Berceuse, other works: unpubd; Trio de concert, 2 vn, va, op.19; 6 Sonatas, vn solo, op.27 (1924); Qnt, 2 vn, 2 va, vc, op. posth.; Variations, on Paganini's Caprice no.24, vn solo, ed. (London, 1960); 10 Preludes, vn solo, op. posth.; Exercices et gammes, vn solo, op. posth.; Sonata, a, 2 vn, 1915

⁹ Michel Stockhem, The New Grove Dictionary of Music and Musicians, ed. Stanlie Sadie (London: Macmillan Publishers Limited, 2001), 27 : 681.

General Remarks about the Collection

Compositionally, technically and pedagogically Ysaÿe's Dix Preludes are simultaneously traditional and progressive for their time. The preludes are mostly post-tonal or quasi-tonal. Rapid changes between harmonies and the use of certain non-tonal elements like augmented triads and whole tone and octatonic collections make them modern (for 1926). On the other hand, Dix Preludes is based in part on past models, like Carl Flesch's Scale Systems, in terms of being a rigorous, systematic study of specific aspects of violin technique. The preludes are an interval-based pedagogical method. In Flesch's book, for example, following various single stop scales and arpeggios are scales and arpeggios in double stops—all of the commonly used tonal intervals—3rds, 6ths, 8ves, fingered 8ves, and 10ths. To this, Ysaÿe adds the rest of the perfect intervals (perfect unisons, 4ths, and 5ths) and the dissonant intervals (2nds, 7ths and 9ths). The addition of these new, uncommon intervals separates Dix Preludes from its predecessors and makes them relevant to the study of twentieth-century music. The use of unusual scales (whole tone, octatonic, etc.), harmonies (augmented triads), and progressions (post-tonal, nonfunctional harmonies) also modernizes these studies.

Ysaÿe also looked to the future pedagogically, as well, by employing the latest accepted stylistic conventions, and, like Paganini, invented some new ones. For example, he used fingered octaves, because they were becoming more widely used and accepted by violinists at that time (and because he found them to be useful). He also employed a new fingering for playing 3rds, using open strings when possible to facilitate smoothness in shifting.

The traditional aspect of the Preludes is to be found in the use of tertian (third-based) harmonies and common scales. In addition, the violinistic techniques involved in playing these intervallic studies are basically traditional. Even when playing uncommon intervals like unisons, the technique is basically the same as with octaves—to preserve the “frame” of the left hand during the shifts. However, the distance of the unison is larger than the octave and the hand is balanced differently, with the fourth finger on the lower of the two strings. Similarly, when playing traditional intervals like thirds, the technique must be altered to accommodate the modernity of the writing—augmented triads, octatonic and whole-tone collections (mixed with some diatonic) create awkwardness in the left hand.

Stretches (extensions), which are played with an open hand position, and contractions, which use a closed hand position, are both required, sometimes with a challenging alternation between the two. These physical labors required for the learning the preludes result in greater flexibility, stamina, and precision in the hands. If prospective players are willing to accept some advice—take Ysaÿe in small doses, for whole tone and octatonic collections can become repetitive and overwhelming to the mind after long periods of exposure. Take a break and leave this sound world for a while, and come back refreshed. Overall, though, the rigorous, systematic nature of this work makes it one of the most valuable for twentieth-century study.

Dix Preludes was not actually completed by Ysaÿe; the work was published posthumously from the composer’s sketches. For this reason, some of what appears in the published version of the work may come under some scrutiny. Several places to be addressed later seem to have been reconstructed rather oddly. The issue of musicality is

also difficult to discuss. Some phrasing is indicated by the composer and some is added by the editors in brackets. Since Ysaÿe did not complete this project, we may never know what his intentions were in this regard. The preludes are divided into several separate exercises, which may or may not be related. Ultimately, the burden falls onto performers and teachers to decide what is best. As discussed in the introduction, dry studies can be extremely beneficial to everyone for a certain amount of time. However, a balance should be maintained, and, thus, the violinist is at liberty to be imaginative with phrasing, sound, dynamics, timbre and so on. Since not much is known about Ysaÿe's ultimate intentions, this topic will not be specifically addressed.

Although space does not allow for a complete analysis of each prelude, and the exercises within them, the pedagogical value of this collection should not be underestimated. The preludes are very effective for improving intonation and flexibility in the left hand. In Addition, the harmonic language, passagework and fingering challenges are directly applicable to a great deal of repertoire from the first half of the twentieth century. The preludes are an excellent preparation to Ysaÿe's Six Sonatas for Violine Solo (1924). In particular, Preludes 3, 6, 7 and 8 contain whole tone collections (and augmented triads), patterns, and technical challenges that can be found in many of the Six Sonatas. Preludes 2, 4, and 5 contain pentatonic, octatonic, whole tone and modal harmonies and collections, which make them applicable technically and aurally to a great deal of violin music (solo and chamber) by composers such as Ravel, Debussy and Bartók. With Preludes 1, 9, and 10, which are valuable for increasing flexibility, every effort should be made to keep the hand relaxed. Move the bow freely, take frequent practice breaks, and avoid storing tension in the joints and muscles.

Bartolozzi, Bruno

Due studi per violino (1952)

Composer Biography

Italian composer and violinist Bruno Bartolozzi (b Florence, 8 June 1911; d Florence, 12 Dec 1980) studied music at the Florence Conservatory. He earned a diploma in violin playing with Gino Nucci (1930) and in composition with Paolo Fragapane (1944). As a violinist, he played with the orchestra of the Maggio Musicale Fiorentino from 1944 to 1965. His greatest compositional influence in his early years came from Dallapiccola, whom he met at the Florence Conservatory.

Bartolozzi's early works, including the Concerto for violin, strings and harpsichord (1957), bear the influence of Dallapiccola (particularly in the use of serialized pitch material). His friendship with the bassoonist Sergio Penazzi, led him to experiment with various woodwind-playing techniques, including multiphonics and microtones. Bartolozzi was able to assimilate these new elements into his compositional language. He continued to borrow avant-garde techniques like aleatory (chance elements), and to explore the possibilities of available sounds and timbres into the 1960's. In his dramatic play, Tutto cio che accade ti riguarda Bartolozzi expresses the "social theme of alienation of the individual in the modern industrialized world" through the contrast between electronic and acoustic sounds as well as vocal effects like sprechstimme.¹⁰

Works with Violin

Conc., vn, str, hpd, 1957; Vn Conc. no.2, 1979;

¹⁰ Raffaele Pozzi, The New Grove Dictionary of Music and Musicians, ed. Stanlie Sadie (London: Macmillan Publishers Limited, 2001), 2 : 824.

Musica a 5, bn, tpt, gui, vn, va, 1953; Serenata, vn, gui, 1955; Str Qt no.1, 1960;

Str Qt no.2, 1979; 2 studi, vn, 1952; Variations, vn, 1957

Composer	Bartolozzi, Bruno
Title	Pause
Style	Twelve-tone
Level of difficulty	Intermediate
Left hand difficulty	
Right hand difficulty	Sound: expression, dynamics, control of speed, weight and color
Other difficulties	Ear training
Value	Twelve-tone style; ear training
Musicality	Expressionist-style gestures, phrasing, dynamic contrasts
Meter	Mixed; mostly 2/4; quarter note remains constant
Tempo	Quarter = 42 (Lento)
Rhythmic difficulty	Medium; various triplets, sextuplets; rests within a slow tempo

Style: The study is a simple 12-tone style composition using only one row form (P₂), D, G, A, F#, C, E, E-flat, F, D-flat, A-flat, C-flat, B-flat. The row is constructed from matching [023579] hexachords. Because this hexachord has only one half-step (semitone) and contains built-in P4ths and P5ths, the melodic and harmonic intervals produce a very open sound. (The last statement of the row is missing an F natural, m. 38 beat 2, which is probably a mistake.)

Right hand difficulty: Sound is of great importance in this study, which deals with expression, dynamics, and control of speed and weight for specific timbres.

Other difficulties: Ear training is important for those with less experience playing twelve-tone music. Play the row on the piano and/or with a tuner at first to hear the intervals clearly. Then play each interval on the violin, and, if necessary, return to play and sing intervals at the piano.

Value: This study is an excellent introduction to twelve-tone and serial music. Only one row form is used, and the tempo is slow enough to allow plenty of time for

imagining (hearing) the pitches clearly before playing them. In addition, the technical requirements for both hands are negligible.

Musicality: Expression, sound and dynamics are of great importance. Dynamics range from *pp* to *ff*, and change suddenly from note to note. The row stays the same, but each time it appears with new rhythm, dynamics, phrasing, expression, and color—specific strings, fingerings and bowings are indicated, which affect the timbre. The study is marked by a beautiful use of silence, hence the title “Pause.”

Composer	Bartolozzi, Bruno.
Title	Ritmi
Style	Twelve-tone/ free atonal
Level of difficulty	Intermediate
Left hand difficulty	High positions; arpeggios; leaps; double stops; intervals: P5ths, P4ths, 3rds, 6ths, 7ths, 2nds, tritones, 10ths
Right hand difficulty	Variety of articulations; string crossings
Other difficulties	Ear training
Value	Good preparation for twelve-tone and serial literature; a variety of row forms (P, I, R, RI) are used at different transposition levels.
Musicality	Variety of short and long strokes; dance feeling; energy; register contrasts
Meter	Mixed; ♩ = ♩
Tempo	Dotted quarter tied to quarter = 60 (Allegro)
Rhythmic difficulty	Medium

Style: The serialism of pitches is more complex than in “Pause,” since P-forms, I-forms, R-forms and RI-forms of the row are used. In addition, false (incomplete) rows are used (mm. 43-46 contain a fake I₉). As in other twelve-tone studies non-matrix rows (secondary sets) are used (ex. mm. 68-73). The row itself is organized by the same [023579] hexachords. In fact, the same P₂ row from “pause” appears in the final measures of “Ritmi” (mm. 73-76). Another important row is P₇, which begins this study and returns in m. 64 to start the coda. Row forms used include P₇ (mm. 1-7), I₁ (mm. 23-25), P₄ (mm. 26-28), R₁₁ (mm. 29-32), RI₉ (mm. 32-35), P₁₁ (mm. 35-38), P₆ (mm. 39-43), RI₂ (mm.

46-48), RI₁₀ (mm. 49-53), I₇ (mm. 54-57), P₁₀ (57-60), R₄ (mm. 60-63), P₇ (mm. 64-68) and P₂ (mm. 73-76). As in other Second Viennese School works (Schoenberg's String Trio, op.45, 1950, for instance), free atonal passages (mm. 8-23) provide contrast to the serial ones.

Left hand difficulty: Arpeggios and jumps, high positions, subtle shifts through the technique of crawling, left hand pizzicato with arco double stops, P5th double stops, unusual intervals (P4ths, 7ths, 2nds, tritones) make this etude challenging for the left hand.

Right hand difficulty: Work for evenness of lifted strokes, especially when string crossings are involved. Stay close to the strings and concentrate on preparations in the arm before each crossing. Many teachers speak about moving the elbow in advance of the bow in order to prepare, and round out, the movement.

Musicality: “Ritmi” contains less expression and dynamic contrast than the previous etude. Here, Bartolozzi is concerned more with rhythm, dance feeling, energy, the contrast between short, and long, bow strokes, and the contrast between accented and unaccented notes.

Rochberg, George

Caprice Variations for Unaccompanied Violin (1970)

Composer Biography

George Rochberg (b Paterson, NJ, 5 July 1918) is an American composer, and is considered, along with Alfred Schnittke, to be among the foremost poly-stylists of the late twentieth century. He attended the Mannes College of Music in New York, where he studied counterpoint and composition with Hans Weisse, George Szell and Leopold Mannes. His studies were interrupted by service in WWII, but he returned to the United States in 1945, and entered the Curtis Institute of Music to study theory and composition with Rosario Scalero and Gian Carlo Menotti (BM 1947). He received a master's degree from the University of Pennsylvania and eventually joined the faculty of Curtis.

Rochberg's early works were influenced by the music of Stravinsky, Hindemith and especially Bartók. Then in the early 1950s, he met Dallapiccola and began to explore Schoenbergian serialism, "his imagination liberated by a language that he took to be the inevitable culmination of historical developments."¹¹ Personal tragedy prompted the composer to discard serialism in the early 1960's. "He increasingly found the method 'over-intense', limited in gesture and constricting in its 'palette of constant chromaticism.'"¹² He therefore began to adopt, in his works of the mid-1960s, a poly-stylistic language, which combined free atonal, and tonal, idioms. The latter often took the form of quotations from the tonal repertory. In the Third String Quartet (considered one of his most important poly-stylistic compositions), for example, he quotes from Beethoven and Mahler. String Quartets Nos. 4–6 were composed for the Concord

¹¹ Austin Clarkson and Steven Johnson, The New Grove Dictionary of Music and Musicians, ed. Stanley Sadie (London: Macmillan Publishers Limited, 2001), 21 : 480.

¹² Austin and Clarkson, 480.

Quartet, and marked the beginning of Rochberg's long partnership with that ensemble. Other important works resulted from this association, as well, including the Piano Quintet and the String Quintet, in which he "furthered his syncretistic ideal of ensuring 'maximum variety of gesture and texture and the broadest possible spectrum...from the purest diatonicism to the most complex chromaticism' (Rochberg)."¹³ In the 1980's and 1990's he continued to compose collage-style works, which blend and juxtapose quotations of music from multiple composers and stylistic periods with free atonal elements of his own creation.

Works with Violin

Vn Conc., 1974; Str Qt no.1, 1952; Serenate d'estate, fl, hp, gui, str trio, 1955; Str Qt no.2 (R.M. Rilke), S, str qt, 1959–61; Contra mortem et tempus, fl, cl, vn, pf, 1965; Str Qt no.3, 1972; Qnt, pf, str qt, 1975; Str Qt no.4, 1977; Str Qt no.5, 1978; Str Qt no.6, 1978; Str Qt no.7 (Rochberg), Bar, str qt, 1979; Octet, a Grand Fantasia, fl, cl, hn, pf, vn, va, vc, db, 1980, unpubd; Str Qnt, 2 vn, va, 2 vc, 1982; Pf Qt, 1983
1–3 insts: Duo concertante, vn, vc, 1953; Pf Trio [no.1], 1963; 50 Caprice Variations, vn, 1970; Pf Trio [no.2], 1985, unpubd; Sonata, vn, pf, 1988; Rhapsody and Prayer, vn, pf, 1989; Summer 1990 (Pf Trio no.3), 1990

General Remarks about the Collection

Rochberg's Caprice Variations for Unaccompanied Violin consists of 51 variations, the last of which is a quotation of the theme from Paganini's Caprice in a minor, op. 1, No. 24. This famous theme has been a source of inspiration to many composers, including Rachmaninoff, Brahms, Schumann and Liszt. Unlike Paganini (and Rachmaninoff), Rochberg places the theme at the end of the work, rather than at the

¹³ Austin and Clarkson, 480.

beginning. In doing so, he creates an unusual structural feature—one which ultimately strengthens the piece. By not placing the theme at the outset, Rochberg avoids being a slave to the nineteenth-century theme and variations paradigms. In Caprice Variations, the theme appears as the culmination of everything that has come before, and acts as a sort of keystone, which finally reveals the original binding element of the variations.

The connection between the variations and the theme (and between the variations themselves) ranges from explicitly clear to tenuous at best. In some cases (as in Caprices 1-5), the harmonic progression used in Paganini's theme is followed precisely. At other times in the work, the connection is a tonal one—as with caprices (like number 12) which are simply in A (major or minor). Many of the caprices that are quotations (like No. 12, which is taken from Brahms' Op. 35, Book 1, Number 12), relate to the theme tonally more than any other way. Another type is found in No. 22, where Rochberg does not state explicitly what he is quoting, though clearly this variation refers to the style of the late Baroque, and its master, J.S. Bach. In this contrapuntal texture, Paganini's harmonic progression is infused with chromatic complexity. In fact, the connection becomes almost unrecognizable, and yet the skeleton of the original harmonic progression remains.

A closer inspection of the harmonic progressions in the tonal caprices reveals a great sense of creativity and invention on Rochberg's part. In particular, the penultimate measure of Paganini's theme contains the pitches F and D# on the downbeat, followed by E, D, and B on the second beat. The most logical interpretation of these implied chords would be a dominant chord on the second beat (missing the G#) preceded by some type of augmented sixth chord (probably Italian). Rochberg reinterprets and reinvents this implied augmented sixth chord (and the entire progression) throughout the work. In

Caprice No. 1 the F-natural appears as a Neapolitan sixth (D, F, B-flat), in No. 2, the F belongs to a ii° (B, F, D-natural), in No. 14, F is part of an ordinary subdominant (D, F, A), to give a few examples.

The relation between Rochberg and Paganini's original theme is most strained during certain free atonal variations. Caprice no. 34 is a good example of this. Here, the connection to the theme and the other variations is reduced to a minimum—the pitch “A” itself is that binding element. “A” is established by being a pedal tone throughout and by a process sometimes called “centering” or “framing.” Centering is achieved by the use of intervals above and below a given pitch, and these upper and lower neighbors create a particularly strong frame when made of semitone (chromatic) relations. Of course, this variation's use of the chromatic upper and lower neighbors of A (B-flat and G#, respectively) also makes a melodic, motivic connection to the sequence in the second half of Paganini's theme (and especially to variation 2 of Paganini's caprice). Motivic connections (rhythmic and melodic) of this type can also be found throughout the work.

Lastly, Paganini's famous caprice contains a high degree of virtuosity and a variety of emotional qualities. The variations could be described in terms of the following characters: Nos. 1 and 2 are capricious and humorous; No. 3 is sinister; No. 8 energetic; No. 9 percussive; No. 10 mysterious and No. 11 virtuosic and wild. All of these stylistic and expressive elements (and many more) are present in Rochberg's Caprice Variations. An interesting structural difference exists between Paganini's 24th caprice and Rochberg's Caprice Variations; in the Paganini, only the first half is repeated, whereas in the Rochberg, both halves are repeated. Therefore, the structure in Rochberg is an

unbalanced AABB (or sometimes AA'BB'), where the B-section is approximately twice as long as the A-section.

The term “poly-stylistic” is used to describe the music of several late twentieth-century composers, namely Rochberg and Alfred Schnittke. Taken as a whole, Caprice Variations fits this classification quite well. One common feature of poly-stylism is the use of quotation. In this work, Rochberg lists (in most cases) the source of these quotations. He incorporates music by Beethoven, Schubert, Brahms, Webern, Mahler, and Paganini, with stylistic references to Bach and popular idioms. (No. 38, for example, is a can-can.) He combines all of this material with his own, original, late twentieth-century musical voice (as in Nos. 34, 35, 39, 42, 45, 47, 48, 49, and 50) to create this poly-stylistic collage.

Individually, each variation is stylistically consistent unto itself, and very few mix contrasting stylistic elements within one variation. The pitch material varies greatly between individual caprices. Caprices 18, 19, 34, 35, 39, 41, 42, 45, 47, 48, 49, and 50 use a free atonal language, which is, for the most part, a very dissonant contrast to the quotations of tonal works and styles. Other caprices, such as Nos. 15-17, are post-Romantic, utilizing a highly chromatic harmonic language evocative of Richard Strauss. Caprices like No. 28 exist in a grey area between post-Romanticism and post-tonality because, although functionality still exists and the piece ends clearly in a minor, the harmonic relationships are stretched sequentially and chromatically beyond the confines of the tonal system. Caprice No. 30 is a neo-Romantic variation of No. 29, whereby the tonality is corrupted by an atonal (whole tone) element, [0268]. Caprice No. 31 is atonal, and develops the centricity of the pitch “A” (B-double flat) through a series of tritone

relations. Poly-stylism appears within Caprice No. 33, which contains a Berg-like mixture of tonal and (tonally related) atonal elements.

Overall, the work moves from simplicity to complexity. The opening five variations are tonal (and based on Paganini's harmonic progression) and, though they establish the energetic and virtuosic character of the work, they represent only a hint of the performance difficulty and the harmonic complexity that is to follow. The technical challenges in the work are of every variety: with the left hand, the right hand, coordination, rhythm, ear training, and mental concentration. Newcomers to music composed in the latter half of the twentieth century may find that the notation and the use of certain effects and extended performance techniques also present challenges. Right hand techniques include, but are not limited to, fast tremolo (No. 5), flautando (No. 18), sul ponticello (No. 18), heavy bow pressure (No. 35), col legno battute (No. 47), col legno tratto (No. 42), expressive indications ranging from "delicate" to "feroce," and a wide variety of strokes, accentuations, and articulations. Unconventional techniques for the left hand include: dissonant intervals (harmonic and melodic), pizzicato with glissandi (No. 14), glissandi (No. 18), left hand pizzicato (No. 24), microtonality (or quarter-tone pitch alteration) (No. 39), passages "as fast as possible" (No. 39), glissandi against a held note (No. 39), large leaps (No. 41), octatonic collections (No. 45), glissandi over harmonics (No. 50), and more.

Caprice Variations very clearly falls into that category of work that may be used for study and/or performance. The variations are very musical, interesting and well-crafted. The work also makes an excellent performance piece, especially since the composer allows for the possibility of performing a selection of variations, rather than the

complete work. He does stipulate that several of the non-tonal variations be played in order to “preserve a balance in the stylistic spread which is fundamental to the premise of this work.”¹⁴

¹⁴ George Rochberg, Caprice Variations for Unaccompanied Violin, (Boston: Galaxy Music Corporation, 1973), 52.

Constantinides, Dinos

Twentieth-Century Studies for Two Violins, Bk. 1 (1970) and Bk. 2 (1979)

Composer Biography

Dinos Constantinides (b Ioannina Greece 1929) is a Greek/American composer and violinist whose music blends post-tonal, modal, and atonal stylistic elements. Early studies took place at the Greek Conservatory of Athens, where he studied theory with Marios Varvoglis and Yannis Papaïoannou (diploma, 1957) and violin with Tony Schulze (diploma, 1950). His studies in the United States began with a diploma in violin at the Juilliard School (1960) while studying with Ivan Galamian and Dorothy Delay. He continued his violin studies with Joseph Gingold at Indiana University (MM, 1965), and received a Ph.D. in composition from Michigan State University (1968) studying with H. Owen Reed. He became professor of violin, theory, and composition at Louisiana State University in 1966 and since 1980 has taught composition exclusively.

Constantinides describes himself as a neo-Romantic, lyric composer.¹⁵ His two most important compositional influences are his performance experience and his Greek heritage. As a violinist performing chamber and orchestral literature (besides being professor of violin at Louisiana State University he was also concertmaster of the Baton Rouge Symphony) he formed an understanding of the sonic and tonal possibilities for all orchestral instruments. The influence of his Greek background appears in the lyrical and rhythmically vital qualities, which are pervasive throughout his compositional output. His output can be divided generally into three parts, though not on a chronological continuum. Many works of the 1960's were twelve-tone in style. In the 1970's and '80's

¹⁵ Dinos Constantinides, interview by author, tape recording, Baton Rouge, LA, 6 April 2004. Much of the information provided, including the works list, as well as remarks about background, influences and style was generously provided by Constantinides.

he began to depart from the strictness of serialism, in favor of a language that blends modal, post-tonal and atonal elements. His recent works have continued to concentrate on, and even expand, this idea of stylistic plurality. Like many composers of the late twentieth century, Constantinides has embraced many often contradictory stylistic trends and blended them with his natural Greek lyrical and rhythmic qualities into a unique and flexible language.

Works with Violin

Mountains of Epirus, vn, orch; Concerto of Psalms, 2vn, orch; arr vn, cl, orch; Patterns, vn, str orch; Concerto, vn, orch; Ballade for John and Samantha, vn, str orch; arr vn, autoharp; Lenna in Minneapolis, vn, str orch; Family Triptych, vn, str orch; Judy Mostly at Home, vn, str orch; Black Creole Dance, vn, str orch; arr vn, pf; Encore, vn, vc, pf, orch; Ojos Criollos, vn, str orch; arr, vn, pf; Souvenire de Puerto Rico, vn, str orch; vn pf; Str Qt no. 1; Dedications, str qt; Evangeline, s, str qt; Mutability, (Str Qt no. 2); Str Qt no. 3; Mutability, arr alto sax, str qt; arr cl, str qt; arr s, str qt; arr hn, str qt; Preludes, str qt; Elegy for K, str qt; A Little Song, fl, str qt; arr fl, v, str qt; Trio no. 1, vn, vc, pf; Greek Dances, 2 vn, va; arr vn, vc, gui; arr vn, va, vc; Kaleidoscope, vn, vc, pf (pf Trio); Trio no. 2, vn, vc, pf; The Oracle at Delphi, vn, cl, pf; arr vn, fl, pf; Trio no. 3, vn, cl, pf; Paraphrase of Recollections for Theofilos, vn (fl), gui; Composition vn, pf; Three Atonal Studies, 2 vn; Twentieth-century Studies, 2 vn, vol I, II; Sonata, vn, pf; Mountains of Epirus, vn, pf; arr 2 vn; Patterns, vn, pf; Concerto, vn, pf; Idyll, vn, pf; Music for Violin and Clarinet; arr 2 vn; Landscape V, vn, pf; Piece, vn; Sonata Solo Violin no. 1; Sonata for Solo Violin no. 2; Sonata for Solo Violin no. 3; Four Interludes for Violin Alone; Lazy Jack and his Fiddle, vn; Fantasy for Solo Violin

General Remarks about the Collection

The preface of this work, where the composer refers to the lack of educational material for twentieth-century repertory, explains its intention. Constantinides was motivated both as a violin teacher and as a composer to produce a work for the enlightenment of his own violin students and to violinists, in general. He felt strongly that violinists were ill prepared for the requirements of modern music. Thus, the collection is designed to train the violinist in the following: ear training (to expand the imagination of the player with regard to tonal centers); extended instrumental effects (col legno battuto, glissando, sul ponticello, etc.); complex rhythmic procedures (mixed meter, irregular meter, unusual rhythmic notation, etc.). With regard to the instrumental effects, the composer noted that even common effects like pizzicato and sul tasto are treated in a modern way because of their quantity, frequency, length, and complex context. The final point about rhythm was also of great interest to Constantinides, who felt that violinists were especially weak in this area (with respect to twentieth-century music).

However, the collection, which consists of two books and thirty-three total etudes, addresses far more than just rhythm. Book 1 deals with techniques employed by pre-World War II composers (until 1945), and Book 2 is concerned with techniques of post-World War II composers. The work is performable and is organized into three-group sets (except the first group, which has six sets). Each set explores a different compositional style or problem associated with twentieth-century music. The subsections from the prefaces are as follows: Scales (modes, synthetic, etc.), Non-Functional Chromatic (atonal), Tonal Relationships, Vertical Sonorities, Serial Procedures, Timbre and

Texture—by Virtue of Organization (total serialism), Rhythm and Dissonance—
Miniatures, Chance, The Divine Repetitions, and Graphics and Grand Finale.

This collection contains one of the most complete explorations of the styles and instrumental techniques of the twentieth century. Many technical challenges are presented to the left and right hands, the ear, and the mind. Aspects for the left hand include: unusual scales and collections (whole tone, No. 4; synthetic, Nos. 6, 10, 21); double stops and melodic intervals (P5ths, Nos. 5, 13, 15, 18, 27; P4ths, Nos. 13, 15, 18, 19; 2nds, Nos. 15, 22, 23, 27; 7ths, Nos. 9, 15, 18, 19, 23, 27; tritones, 19, 27); chords (No. 14, 20); melodic leaps (Nos. 16, 18, 25); extensions (Nos. 3, 16, 17); chromatic passages (No. 23); unprepared high notes (No. 9); glissandi (fast, No. 33; large, No. 8; with vibrato, No. 16; pizzicato, No. 32; in 7ths, No. 20); vibrato effects (Nos. 7, 8, 32); left hand pizzicato with arco (No. 9); artificial harmonics (No. 9). The right hand issues include the following: extended instrumental techniques (sul ponticello; sul tasto; col legno battuto, Nos. 9, 19, 21, 32; sub ponticello, Nos. 20, 32; fast, arrhythmic tremolo, No. 20); string crossing difficulties (Nos. 7, 8, 10, 16, 25, 27); triple stops and chords (Nos. 4, 14, 20, 21, 32); a variety of strokes (Nos. 12, 19, 20, 21).

Challenges to the mind concern multi-tasking (No. 26) and rapid changes between techniques (No. 19). Ear training is significant as a direct result of the stylistic variety in the collection and includes serialism (12-tone), atonality, clusters, poly-chords, quartal harmonies, synthetic collections, and modality. Many of the studies contain complex rhythmic and metric procedures such as mixed meter (Nos. 4, 9, 15, 19), metric reorganization (No. 22), phase shift (Nos. 28, 29), free rhythm (No. 30), visual notation (Nos. 21, 25), and duration by seconds (No. 26). Notation is an issue in and of itself,

especially in places where graphic (No. 31) and visual (Nos. 21, 25, 26, 27, 32) indeterminate elements are involved. The studies are also unique in this document for the presence of ensemble problems.

The tradition of writing studies as duos started with composers like Pleyel, Bartók and Wienawski, and Constantinides borrows elements from all of these. Like Bartók, both violin parts are of equal importance. In addition, both Constantinides and Bartók composed these pedagogical pieces as well-crafted performance works and drew upon them as a learning tool and as a source of inspiration for future works. However, like Wienawski, one of the violin parts (usually, but not always, the first) is more difficult in certain places—with more passagework, higher positions and (sometimes) more melodic material. The teacher could play the more challenging violin part, or assign this part to the student, depending on his/her ability. The etudes could also be played by two students (observed from the side by a teacher) or by two professionals wishing to perform one or both sets. Several mistakes in the scores have been discovered in the current edition. The list of errors in the studies (confirmed by the composer) is as follows: No. 3, m. 8 (violin 1) add another eighth note rest after the A5 on beat four of the bar; No. 4, m. 23 (violin 2) fourth eighth note C# should be C-natural, m. 55-58 (violin 1) all F#s should be D#s; No. 15, m. 82 is still in 6/8; No. 16, m.16 (violin 1) B-flat should be changed to E-flat (up a P4th); No. 18, m. 11 (violin 2) E6 at the end of the measure should be G6; No. 21, m. 135 (violin 1) C#5 in beat two should be D#5.

Composer	Constantinides, Dinos.
Title	1. Ionian (Pandiatonic)
Style	Neo-Classical; mostly C major collection
Level of difficulty	Intermediate (violin 1); Easy (violin 2)
Left hand difficulty	High positions for violin 1
Right hand difficulty	Strokes—detaché 16ths (on the string) and staccato eighths (off the string)
Other difficulties	
Value	This study should be prepared in the context of its connection to the neo-Classical repertoire of Stravinsky, Prokofiev, et al.
Musicality	Traditional phrasing
Meter	4/4
Tempo	Allegro vivo, Quarter=132
Rhythmic difficulty	Simple, some ties and offbeats

Style: Etude No. 1 uses the C major collection almost exclusively (except for occasional C#s added for harsher dissonance). Despite the static quality of the harmonic material, progressions do occur and a sense of tonal hierarchy does exist to a certain extent. However, true tonality is undermined by an emphasis on vertically dissonant sonorities, pandiatonicism, and modality. In mm. 6-7, for instance, a dominant to tonic progression takes place, but the “dominant” chord is a G7 with E as its root (E, G, B, D, and F). Thus, we feel the resolution in m. 7, but the added tone is perceived as an impurity in the language. The emphasis on dissonance in neo-Classical music (as in Stravinsky’s Pulchinella Suite or Prokofiev’s “Classical” Symphony No. 1) is intended as both a reinterpretation of, and in many cases, a poking fun at, the models of the past. Certainly, this seems to be the case in Constantinides’ study, given the overt dissonance, the unwavering insistence of the C major collection, and the comical final measure, which finishes on an A-flat augmented triad.

Musicality: The musicality is traditional in many ways, and the phrasing is clearly illustrated by the dynamics in the score. One need only produce the dynamic profiles and give direction to the lines where necessary to play the piece musically.

Rhythm and meter: The meter is intentionally obscured in several places (ex. mm. 18-34). Repetition leaning towards minimalism frequently shifts the sense of meter. Changing rests and the interaction between the parts presents a certain difficulty for ensemble togetherness. Also, the repetition itself, especially in this case where it exists outside the metric framework, has the tendency to mesmerize and confuse the mind.

Composer	Constantinides, Dinos.
Title	2. Modal (Dorian-Aeolian)
Style	Modal
Level of difficulty	Easy
Left hand difficulty	
Right hand difficulty	
Other difficulties	
Value	Modal language in a technically simple setting
Musicality	Traditional phrasing
Meter	4/4
Tempo	Moderato, quarter=84
Rhythm	Simple

Style: The study presents a contrast between the Dorian and Aeolian modes. Overall, the harmony created by vertical events is more consonant and open-sounding (with perfect consonance) than the previous study. The first violin begins with the A Dorian collection (mm. 1-5) until changing to E Aeolian (mm. 5-9). Beginning in m. 9 the second violin joins with the E Dorian in counterpoint with the first violin's B Aeolian. In m. 21, the two original collections (A Dorian and E Aeolian) appear in counterpoint until the end. Interestingly, the combination of the two collections produces a compound D mixolydian collection.

Other difficulties: Ear training difficulty exists because of the change between modes. From this arises an ambiguity of mode and the absence of a central pitch upon which the ear can rely.

Composer	Constantinides, Dinos.
Title	3. Modal (Phrygian)
Style	Modal
Level of difficulty	Intermediate (violin 1); Easy (violin 2)
Left hand difficulty	Violin 1 only—fast extensions, 1st finger action; range from first to seventh position; chromatic passages; double stops in 3rds, 6ths, 8ves
Right hand difficulty	String crossings (violin 1); dynamic changes
Other difficulties	Ear training: change between modes, collections, harmonies
Value	Work with modality and contrasting collections within an exuberant folk style
Musicality	Heavy, “foot-stomping” dance; folk music
Meter	Mixed, quarter remains constant
Tempo	Allegro molto, quarter=152
Rhythmic difficulty	Simple

Style: A Phrygian (A, B-flat, C, D, E, F, G, A) is the modal center of Study No. 3. B Phrygian, G Dorian, octatonic and chromatic collections, D Lydian/Aeolian, and D Major, c minor, and g minor sonorities (chords) make up the rest of the harmonic and melodic material.

Left hand difficulty: The first violin part contains some challenging double stops (mm. 17-19, 23-24, 25-26, and 33), which are tricky due to the quick extensions required by the first finger, and changes of first and second finger placement. For example, in m. 17 the first finger plays A in first position on the G-string, then extends back a 1/2-step and across two strings to B-flat on the A-string, and returns to the original A on the G-string. This action occurs within two beats.

Right hand difficulty: Dynamic extremes and rapid changes are unpredictable. In m. 6, for example, the dynamics change in the following combination: *ffp*<>*ff*. Also,

large string crossings (for violin 1) in mm. 23-24 are challenging, particularly in combination with the left hand action.

Musicality: The rhythmic dialogue between the two parts is crucial to the success of the phrasing in this music. The material is actually most defined by what is not present—that is, material is constantly interrupted by rests that are filled in by the action of the other part. Thus, while one player is halted by silence, the other player is obligated to give great energy at exactly that moment. In general, these strong beats (downbeats or beats in the middle of a bar) should be heavy, but also explosive (with arm weight and fast bow speed) so that the other player can bounce off the impulse.

Rhythm and meter: Although the meter is mixed, the quarter note pulse remains constant, which simplifies the metric aspect of this study and makes it a very good introduction to this procedure in the literature.

Composer	Constantinides, Dinos.
Title	4. Whole Tone
Style	Free atonal (whole tone)
Level of difficulty	Advanced (technical, metric, ear training challenges, fast tempo)
Left hand difficulty	Whole tone collections in 3rds, 6ths, chords, passages; high positions; awkward hand positions
Right hand difficulty	Awkward bowing resulting from asymmetric meters (ex. 7/8), groups of three usually played down-up-up; triple chords down-up-up (violin 1, m. 30)
Other difficulties	Ear training, whole tone collections
Value	Whole tone collections in 3rds, 6ths, chords, passages; complex metric shifts and relationships; applicable to Ysaÿe
Musicality	Playful syncopation; dynamic extremes, rapid changes
Meter	Mixed, complex relationships; ♩=♩; 4/4, 3/8, 5/4, 7/8, 9/8, 2/4, 1/4; metric shifts
Tempo	Allegro, quarter=144
Rhythmic difficulty	Medium, syncopation and complex metric relationships

Style: The harmonic language, made of whole tone collections, is without a tonal center or procedures, and is, therefore, in a free atonal style. The continuous phrasing,

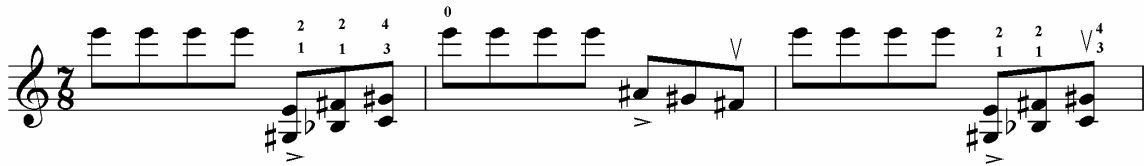
imitative (canonic) interplay between the parts and melodic contour add a neo-Baroque aspect to the composition. The main theme of the piece (mm. 1-4, 32-35, 69-72) resembles a neo-Baroque, canonic duet (in the style of Telemann) with post-tonal harmony and counterpoint. To this, the modern features of mixed meter and the whole tone collection are added. Contrasting whole tone scales (C-natural and C#) mark divisions between large sections and help to form the structure of the study. See example 6 shown below.

A	A	B	Trans.; A'
mm. 1-45	1-45 (repeat)	46-59	60-68; 69-96
C-natural W. T.	C-natural W. T.	C# W. T.	C-natural W. T.

Ex. 6. Form chart with contrasting whole tone collections

Left hand difficulty: Whole tone collections make finger pattern difficulties with extensions, challenging double stops, including parallel 3rds, parallel 6ths, and chords in a brisk tempo. Large shifts, fourth finger extensions, melodic passages using whole tone collections, and some high position passages are also problematic. As with so much left hand work, preparations are essential. For instance, when playing parallel whole tone 3rds, the action of the second finger must be calculated. While a 3rd is being played with the first and third fingers, the second finger should be angled in close to the third finger (as opposed to lagging back next to the first) above the string of the first finger. (This sounds complicated, but it simply means that the second finger should be ready and waiting directly above the note that it will play next.) The parallel whole tone 6ths are more complicated in this tempo. When playing ascending 6ths the finger on the higher string must cross over to the lower string and up by a 1/2-step. For descending, the finger on the lower string must cross over to the higher string and down by a 1/2-step. In some cases, like m. 74 (violin 1), this technique cannot be avoided. However, in mm.17-19

(violin 1), Ysaÿe's inventive fingering may be adopted. Thus, G#-E is played with the first and second fingers, which then shift to play B-flat-F#, and C-G# is played by the third and fourth fingers in a contracted position. Ysaÿe's fingering is clever because it condenses two movements into one. See example 7 below.



Ex. 7. Fingering, violin 1, mm. 17-19

Right hand difficulty: Bowing awkwardness results from uneven meters like 7/8 and 9/8 and requires the use of consecutive up-bows or retake bowings. The difficult double- and triple-stops must be well-articulated by the right hand.

Other difficulties: Ear training challenges result from the use of whole tone collections. As with other studies, the players must use a tuner and/or piano to improve the mastery of tempered intonation.

Musicality: Phrases usually begin with the characteristic syncopated figure introduced in m. 1, and illustrated by mm. 32 and 69. Otherwise, the phrasing is fairly continuous.

Rhythm and meter: The ♩ remains constant throughout, which is helpful to the players, but the lack of a consistent large unit of pulse makes this study an advance over the metric complexity of Study No. 3.

Composer	Constantinides, Dinos.
Title	5. Pentatonic
Style	Post-tonal, with Exoticism (pentatonic)
Level of difficulty	Intermediate
Left hand difficulty	High positions; double stops in P5ths, 6ths, chords (violin 2)
Right hand difficulty	
Other difficulties	
Value	Work with the pentatonic collection; applicable to music by Debussy, Ravel, Vaughan Williams, others
Musicality	Traditional phrasing
Meter	3/4
Tempo	Moderato, quarter=69, 80, 69
Rhythmic difficulty	Simple

Style: Study No. 5 is an example of Exoticism in music, whereby the entire composition evokes the sound of Eastern music through the unwavering use of a single pentatonic collection. The term Exoticism is not generally used in music, but is being borrowed from turn-of-the-century painting, which was heavily influenced by exposure to Asian arts and culture. The consistency of the C pentatonic (C, D, E, G, A) throughout creates a harmonic stasis. Therefore, no pitch center is established, and the piece ends ambiguously on a G-D open fifth.

Left hand difficulty: Arpeggios with extensions, high position passage work (Violin 1), double stops and chords with P5ths, P4ths, and 2nds (violin 2) make this a fairly challenging study despite the harmonic stasis and moderate tempos.

Composer	Constantinides, Dinos.
Title	6. Synthetic
Style	Free atonal, synthetic collections (nonsymmetrical)
Level of difficulty	Advanced (especially when played at tempo)
Left hand difficulty	Synthetic scales, awkward, unpredictable patterns
Right hand difficulty	Awkward down-up-up bowings as per No. 4
Other difficulties	
Value	(Nonsymmetrical) Synthetic collections; awkward, unusual scalar patterns and double stops with extensions
Musicality	Continuous phrasing
Meter	Mixed, alternating 7/8 and 6/8
Tempo	Presto, ♩=276
Rhythmic difficulty	Simple

Style: Also called *artificial* scales, synthetic scales are defined usually as collections which are invented (not part of the standard tonal, modal, or non-Western canon of scales), and include the whole tone, octatonic, dodecaphonic, half step-minor third, and whatever else a composer can imagine.¹⁶ This particular study makes use of synthetic scales, which are, for the most part, nonsymmetrical. (The whole tone, and to a certain extent the octatonic, collections are said to be symmetrical, since the pattern of intervals remains the same throughout the scale.) One of these nonsymmetrical collections is the pentatonic. For example, m. 13 uses the C pentatonic collection (C, D, E, G, A). Other contrasting synthetic scales are combined with contrasting meters. D major and C#°7th chords combine to form the collection (C#, D, E, F#, G, A, B-flat) in mm. 1-12. In melodic (horizontal) terms, one could also describe the collection as a combination of two scales, D major and d harmonic minor. This technique is utilized by many twentieth-century composers, including Bartók. Variant forms include the synthetic scales (C#, D, E, F#, G, B-flat) in m. 15, which is made from a combination of a B-flat augmented chord and a C#° 7th. Another variant (C, C#, D, E, G, A, B-flat) is made from

¹⁶ Edward Aldwell and Carl Schachter, *Harmony and Voice Leading*, 2nd ed., (New York: HBJ, 1989) 450.

a combination of a g minor chord and an A major/minor chord. A study in contrast is presented between the following in example 8. Interestingly, the composer's synthetic scales also contain the pitches of the pentatonic with one or two 1/2-steps added.

Synthetic Scales	C Pentatonic
(C),C#, D, E, (F#), G, A, B-flat	C, D, E, G, A
Meter: 7/8	Meter: 6/8
Uneven, off-balance meter (2 + 3 + 2) or (3 + 2 + 2); tension in scale and harmonies	Even, lilting meter; pure, open sound of the pentatonic (no semitones or tritones)

Ex. 8. Form chart with contrasting collections and meters

Left hand difficulty: In general, the synthetic scales are problematic because of the irregular pattern of 1/2- and whole-steps (and occasional augmented 2nds).; In mm. 43-44 (violin 1), for example, the descending scale with minor, major and augmented 2nds requires well-prepared extensions of the first finger (assuming that the B-flat in mm. 43 is played with a first finger). The first violin part also contains passages in high positions, and in mm. 40-41 contains a large leap from first to eighth position. In mm. 36-44, examine the second violin part and the action of the second finger, which is constantly changing its position and pattern within the hand. In mm. 36-37, the second finger plays G on the E-string, B-flat on the G-string, F# on the D-string, B-flat on the G-string and C# on the A-string (an augmented 2nd). In m. 17, the second violin part contains chords that are difficult for intonation; this results from an abundance of P4ths and P5ths and the fingering complication (the first finger must always extend back for the B-flat). In a reasonable tempo everything in this study is manageable, but the given tempo (♩=276!) makes all of the technical work significantly more challenging.

Value: Difficult scale patterns, changing finger placement, extensions, difficult double stops (6ths and 7ths mixed in), and some awkward (down–up–up) bowing for irregular figures are important aspects of the work in this study.

Composer	Constantinides, Dinos.
Title	7. Atonal I
Style	Free atonal
Level of difficulty	Intermediate (violin. 1), Easy (violin. 2)
Left hand difficulty	Senza vibrato, con vibrato, and harmonics; unprepared entrances on high notes (violin. 1)
Right hand difficulty	Sul ponticello, sul tasto, and tremolo; large string crossings between the G-and E-strings
Other difficulties	Ear training for free atonality
Value	Atonal style; unprepared high notes (Violin 1 only); 20th-century effects, timbres
Musicality	Play expressively with dramatic contrasts between different dynamics and timbres; as with Adler Study No. 3 and other atonal pieces, contrast “pure” vs. expressive sounds
Meter	4/4
Tempo	Quarter = 60
Rhythmic difficulty	Medium; contains triplet divisions with ♩ and quarter notes

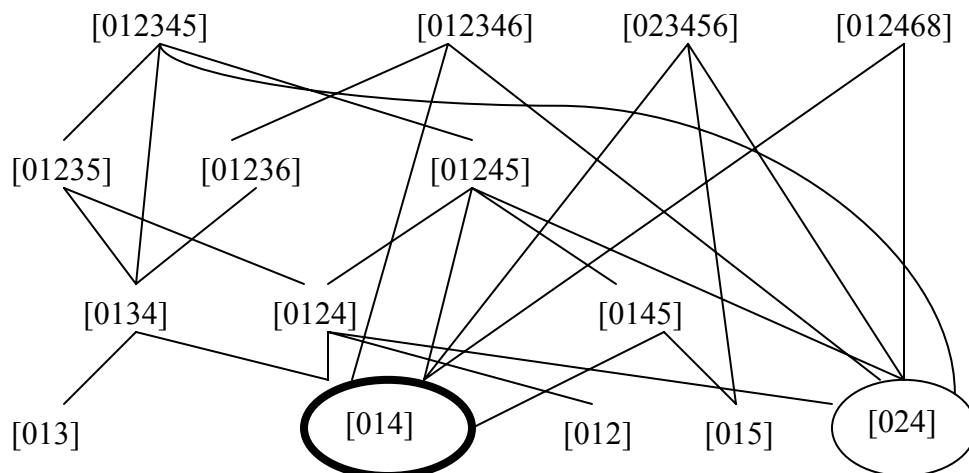
Style: Study No. 7 is atonal, since the harmonic language does not create a pitch or tonal center. The music is organized melodically and harmonically into sets (mostly trichords), but they do not relate to one another to form a web or network of intervallically related subsets and supersets (as in most Second Viennese School atonal compositions). Two sets which do appear with some consistency are [012] (mm. 1-2, 12-14) and [015] (mm. 2, 8-9, 15). Variety of pitch class and interval class content, rather than invariance, seems to be most important in this nineteen-bar miniature.

Left hand difficulty: Unprepared entrances on high notes (Violin 1 only) in mm. 11-12 require special attention. Be aware of the starting and ending places of the first finger, for this shift must be practiced and memorized. The performer should practice sliding the first finger lightly on the E-string from A-natural (third position) to F# (8th

position) in order to play the B (fourth finger) in m. 11. Then practice the shift from A (third position) to G (ninth position) to play the C. Some players with larger hands and/or different technical styles may choose to shift to the E natural in seventh position (for example) and extend the fourth finger to reach the B and C. In any case, the shift(s) with the first finger should be practiced audibly, silently (by stopping the bow during the shift), then in context, and finally with the proper musicality (tremolo, ponticello, *pp*, etc.) added. The shift should always be practiced in a steady rhythm—slowly at first, then gradually faster.

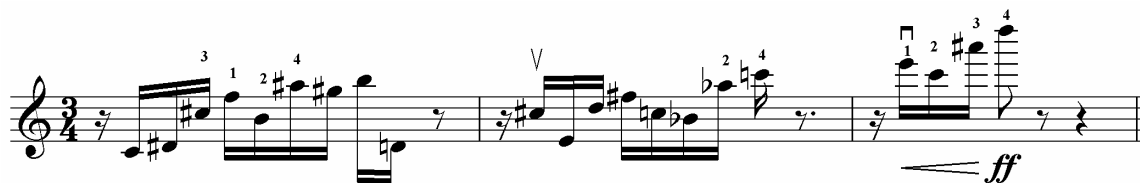
Composer	Constantinides, Dinos
Title	8. Atonal II
Style	(Strict) Atonal (Second Viennese School style)
Level of difficulty	Intermediate
Left hand difficulty	Large glissandi, senza-molto vib.; difficult passagework with extensions and leaps
Right hand difficulty	Effects: sul pont., sul tasto, harmonic tremolo, large crossings with skipped strings
Other difficulties	Ensemble togetherness; ear training
Value	Atonal style; complex left hand passagework; ear training
Musicality	Phrasing by gesture, dialogue; make extreme contrasts with dynamics, effects, timbres
Meter	Mixed; quarter remains constant
Tempo	Constantly changing; difficult tempo relationships (quarter = 132, 60, 120, 80, etc.)
Rhythmic difficulty	Medium; the rhythms are simple, but they must be felt in ever-changing tempos

Style: The atonality of this study is stricter than that found in No. 7. Small and large sets relate intervallically (in terms of sub- and superset relations) to one another to form a complex network. Notice how the [014] and [024] trichords form the basis for this intricate web; many of the larger sets are actually derived from these smaller ones. See example 9 below. For instance, [012345] contains two [024]’s and two [014]’s (represented by the numbers 0, 2, 4 and 1, 3, 5, and 0, 1, 4 and 1, 2, 5, respectively).



Ex. 9. Atonal sub- and superset relations

Left hand difficulty: Many difficult passages with triplets, quintuplets, and sextuplets (sixteenths) arise from the atonal style. The notes are inconvenient because of the disjunct lines and patterns, which do not fit within the octave framework of the hand. This requires good fingering choices to manage the contraction and expansion of the hand within one position and for shifting to other positions. Example 10 from mm. 15-17 is shown below. Notice that the only shift of position occurs during the rest between mm. 16 and 17 (from first to seventh position). The rest of the fingerings involve the use of extensions and string crossings while remaining in position. Additionally, pay close attention to the efficiency achieved by playing in half position in m. 15 (until beat 3).



Ex. 10. Fingering, violin 1, mm. 15-17

Rhythm and meter: The players should practice with and without the instrument for rhythm. The transition from one tempo to another can be unnerving. First, set a metronome (or two metronomes would be better) to the various tempos, and simply

follow the score. Then, do the same while verbalizing your rhythm. Only one transition at a time can be practiced, since the metronome pulse will have to be changed. Lastly, practice each transition while playing the parts.

Composer	Constantinides, Dinos.
Title	9. Atonal III
Style	Atonal; whole tone
Level of difficulty	Intermediate (Vln. 1); easy (Vln. 2)
Left hand difficulty	L.H.Pizz. with arco (Vln. 2); intervals, M7ths and m9ths; unprepared high notes (Vln. 1); artificial harmonics
Right hand difficulty	Small wrist crossings (Vln. 1, mm. 7, 12, 17); effects: col legno battuto, sul pont., sul tasto
Other difficulties	Ear training, free atonal (whole tone) language
Value	Atonal style; left hand training; whole tone collections; especially good introduction to this style for second violinist, since technical requirements are negligible
Musicality	Phrasing is interrupted but clearly marked by double bars; as with other atonal pieces, make extreme contrasts with timbres, effects, atmosphere, characters, gestures, dynamics
Meter	Mixed, complex relationships
Tempo	Changing, both speeds and unit of pulse (quarter = 80, quarter = dotted quarter, dotted quarter = 100, etc.)
Rhythmic difficulty	Medium; the rhythms are simple but feeling them within changing meters and tempos is tricky

Style: The free atonality in this study is mostly a contrast between the two whole tone collections (C whole tone and C# whole tone). Sometimes these collections appear overtly, as with the C# whole tone collection in the second violin part, mm. 7-8; the Violin 1 part in these same bars reveals the two collections hidden within a contrapuntal texture. The broken major 7ths expose two independent horizontal lines; the top line (A, B, C#, and D #) is a C# whole tone collection, while the bottom line (B-flat, C, D, E, D) makes up the contrasting C whole tone collection. The composite collection formed from these overlapping whole tone collections is, of course, highly chromatic. For instance, the same procedure in m. 17 produces the full aggregate.

This miniature (18 bars) is more Viennese in terms of its compactness of form and phrasing than in its pitch language. Two sets that are important, however, are [015] and [012], sometimes expanded to tetrachords [0157] and [0123], respectively. These sets help to define the main sections by their appearances. The theme of the A-section (mm. 1-7) is made up of [0157] (D, C, F#, G) in m. 1-2 and [015] (F, A, E) in m. 2. The second violin takes over in mm. 4-6 with an off-balance 6/8 figure, which is interrupted by the [0123] and [012] overlapping C and C# whole tone collections of m. 7. The B-section (mm. 8-14) is an inversion of the A-section, with the second violin playing the [015] theme transposed down by M6th and the first violin taking up the 6/8 figure in m. 11. This figure is truncated by the whole tone interruption of m. 12 and is followed by a transition with a rhythmic reference to the theme in m. 13 (the left hand pizz. of violin 2). Measure 15 marks the beginning of the Coda, with [015] (G, B, F#) in Violin 2 and [0123] (C, B, B-flat, A) in Violin 1, sets in combination. The two violins play the theme together a M7th apart in m. 16, to emphasize the C whole tone (Violin 1)—and C# whole tone (Violin 2)—collections, which finally bring the piece to its conclusion.

Left hand difficulty: The whole tone collections create awkward extended hand positions (usually the first finger will extend back or the fourth finger forward) and unusual intervals such as parallel broken M7ths (mm. 7, 12, 17) and m9ths (m. 15—for Violin 1 only). For the unprepared entrance on a high note in m.15 (Violin 1), practice the shift from F in fifth position to B in eighth position on the A-string.

Composer	Constantinides, Dinos.
Title	10. Remote Tonal Shifts
Style	Post-tonal, contrapuntal
Level of difficulty	Intermediate
Left hand difficulty	Synthetic scales; passagework with awkward patterns
Right hand difficulty	String crossings across three and four strings with hemiola
Other difficulties	Ear training—abrupt tonal shifts, synthetic scales, all types of intervals
Value	“Remote tonal shifts;” ear training; left hand training
Musicality	Contrapuntal structure and phrasing requirements
Meter	6/8
Tempo	Quarter = 80
Rhythmic difficulty	Simple; playful, buoyant use of 2 against 3 hemiola

Style: The pitch language is difficult to analyze because it changes abruptly before establishing a tonal, or modal, center. Many modal, tonal, and synthetic collections appear in succession throughout the work. The form of the study is defined by the contrapuntal procedures, which are fugal in nature. The subject is introduced by the first violin from the beginning to the second beat of m. 4 (ending on D#); the countersubject is played by the second violin (mm. 3-4). The countersubject is actually derived from the middle of the subject, which contains a P4th and a m3rd (B-E-G) from m. 1, beat 2, to m. 2, beat 1. The countersubject enters immediately after with a P4th and, this time, a M3rd (C-F-A), then transposes this down by minor third (A-D-F#). The resulting counterpoint consists of an interesting variety of intervals: P5ths (C-G, A-E) and P8ves (A-A), imperfect consonances in 3rds (D-F, F#-D#), and dissonances in 7ths (A- G). The opening measures also illustrate the abrupt change from the C major collection, to (possibly) the c# minor collection (m.4, beat 2) and back to C major in m. 5.

A long episodal passage with hemiola from mm. 18-43 is followed by middle entries of the subject in mm. 44-51 and again in m. 61 (violin 2). The recapitulation begins with the violin 1 pick-up to m. 67 with the original subject and countersubject

together. However, in mm. 71-87 (the end), Constantinides begins a note-for-note retrograde of mm. 1-17 (in pitch, not rhythm) with the violin parts inverted. (The counterpoint is not in retrograde inversion since the subject is played in the same register above the countersubject.)

Left hand difficulty: In some cases, a good fingering can make challenging passages a great deal simpler. The first violin (mm. 60-61) should shift to third position on the downbeat of m.60, to fourth position on the accented F (the ninth sixteenth of the bar), and back to first position on m. 61. The high F6 in m. 60 will be played with a fourth finger extension. Replacement fingerings are very useful for simplification of awkward P5ths. In this case, the third finger is pushed out of the way and *replaced* by the second. The replacement technique is like a combination of the crawling technique and an actual shift. In mm. 64-66 the first violin should shift to fourth position on E-flat (after the open E) in m.64, to fifth position on C6 (another replacement fingering on a P5th), and to eighth position on the F6. See example 11 below.

The second violin passage from mm. 71-75 has two options. The simplest is to stay in first position in m. 71 and slide to the G6 with the third finger in m. 61. The other possibility is to shift to fifth position in m. 71, crawl into sixth position in m. 72, and play the G6 with the fourth finger. (The second option is safer but more difficult for intonation.) In either case, the G#6 in m. 73 will be played by the first finger and the same note in m. 75 with the fourth finger in sixth position. Example 12 below illustrates this. Choice of fingering is very personal and depends on the hand and technique of the individual.

Violin I

Violin 2

The image displays the first system of the piano introduction for Gustav Mahler's 'The Wind' (Symphony No. 10, 3rd Movement). The music is written for a single melodic line in 6/8 time, with a key signature of one sharp (F#). The system begins with a melodic phrase in the first measure, followed by a triplet of eighth notes in the second measure. The third measure contains a triplet of eighth notes, with a 'cresc.' (crescendo) marking above it. The fourth measure is a triplet of eighth notes, with a 'mf' (mezzo-forte) dynamic marking below it. The fifth measure is a triplet of eighth notes, with a 'f' (forte) dynamic marking below it. The sixth measure is a triplet of eighth notes, with a 'ff' (fortissimo) dynamic marking below it. The system concludes with a triplet of eighth notes in the seventh measure, with a 'ff' dynamic marking below it. The score includes various musical notations such as triplets, crescendo markings, and dynamic changes.

Other difficulties: Ear training is problematic in this study for obvious reasons.

Value: As with other studies discussed in this monograph by Adler and Smith, Study No.10 by Constantinides is applicable to a great deal of twentieth-century repertoire by Shostakovich, Prokofiev, Hindemith, Stravinsky and others. The music in many works of the first half of the century contains tertiary harmonies and modulations with precisely these kinds of “remote tonal shifts.”

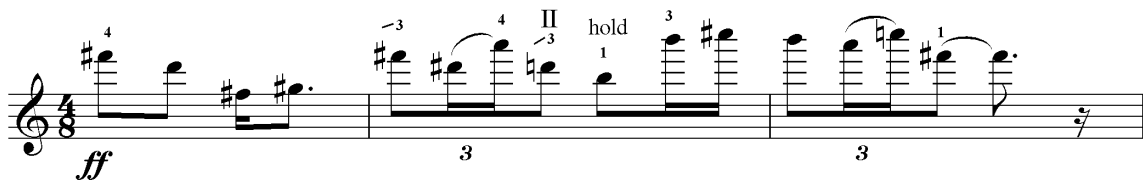
Musicality: Players should approach this piece as they would a two-part invention or violin fugue by Bach. The subjects and countersubjects should always be audible (especially the entrances). A case could be made for playing with a tempered or non-tempered (expressive) sense of intonation. Expressive intonation could be an effective way to exaggerate the abrupt change between tonal (and non-tonal) collections. In performance terms, this translates into playing the sharps in m. 4 very slightly higher than normal. However, this procedure should be avoided when playing synthetic scales like those in mm. 9-12 unless both players agree to emphasize certain pitches or harmonic centers.

Composer	Constantinides, Dinos.
Title	11. Polytonal Formations
Style	Polytonal
Level of difficulty	Intermediate
Left hand difficulty	High positions; unusual melodic modality (chromatic and augmented 2nds)
Right hand difficulty	
Other difficulties	Ear training
Value	Directly applicable to the music and style of Bartók, Kodaly, etc.
Musicality	A simple, but very expressive, lyrical folk song
Meter	4/8
Tempo	Andante; ♩ = 84, 108, 84
Rhythmic difficulty	Medium

Style: The polytonality of this etude is both vertical and horizontal. Harmonically, the two violins use contrasting pitch collections simultaneously; melodically, the collections themselves are polytonal. The second violin enters at the beginning with a g minor harmony, but this sonority becomes ambiguous (major/minor) when B-natural and B-flat appear together in mm.2 and 4. In mm. 3-4, F-natural (rather than the typical raised 7th scale degree, F#) is used, which adds a dimension of modality to the melodic collection. A fifth above this, the first violin is similarly revealing a D

major/minor/modal idea. By themselves, the parts sound reminiscent of the music of Bartók, and the combination of the two parts produces a unique texture, which is both modern and immediately expressive.

Left hand difficulty: Mm. 18-23 in the second violin should be played entirely on the G-string; any technical discomfort is well worth the benefit of timbral consistency in this case. The whole passage can be played in first position by sliding with the fourth finger from E-flat to D (mm. 18, 20, 22, and 24). In addition, a tiny amount of finger vibrato is appropriate (especially on the notes following grace notes), for this creates a gypsy-esque character in the sound. The first violin has a challenging high-position passage in mm. 35-37, the (possible) fingering for which is illustrated below in example 13. Notice that the third finger replaces the fourth from A6 to D6 in the first half of m. 36.



Ex. 13. Replacement fingering with shifts and extensions, violin 1, mm. 35-37

Composer	Constantinides, Dinos.
Title	12. Abrupt Tonal Shifts
Style	Post-tonal; modal
Level of difficulty	Intermediate
Left hand difficulty	High positions; sudden shifts between different scales or collections
Right hand difficulty	Variety of strokes—marcato, (off), detache, martele (on); triple stops; very good for articulation and coordination work
Other difficulties	
Value	Ear and left hand training for sudden, unusual changes and combinations of tonality which result in an overall modality; applicability to Prokofiev, Shostakovich and others
Musicality	Traditional; phrasing is continuous, with staccato eighths providing an oscillating bass line; give direction to appropriate lines; contrapuntal entrances must be clear—perhaps play two down bows on the quarter, dotted quarter subject (ex. m. 33)
Meter	3/4
Tempo	Allegro; quarter = 132
Rhythmic difficulty	Simple

Style: This study, entitled “Abrupt tonal shifts,” is simpler, in many ways than No. 10 (“Remote tonal shifts”). Despite the use of the word “abrupt” in the title, the changes are actually less sudden than in No. 10, and much closer in relation. Both studies contain polytonal, modal, and contrapuntal elements, but in No. 12, these aspects are simpler and less exaggerated. The opening of the study alternates between G major and F major (two bars of each) until they merge, somewhat, in mm. 12-15. However, this merger creates not a true polytonality, but rather an alternation between G major and G dominant seventh.

The B-section (mm. 16-54) is developmental and more complex. It begins with a circle of fifths progression, G, C, F, B-flat, E-flat, A-flat—major, (which could also be interpreted modally as G, F, E-flat—modal) until arriving suddenly on D major in m. 23. A new contrapuntal subject (theme) is introduced by the first violin in m. 33, with a countersubject in the second violin. In m. 39, violin 2 plays the tonal answer to violin 1’s

subject, while violin 1 plays the countersubject. The harmony continues to shift through closely related keys throughout these contrapuntal procedures. The Recapitulation (A') begins on the pick-up to m. 55 with an exact repeat of mm. 1-14 with the two violin parts switched. More counterpoint is included, with entrances of the subject in m. 78 and the tonal answer in m. 82. The piece concludes with a slightly cryptic and comical P5th-diminished 5th, but upon closer examination, it encapsulates the G major/minor/modal contrasts in a single compact gesture.

Right hand difficulty: Despite the composer's staccato indications at the beginning, the strokes should not be played excessively short. Both the eighths and sixteenths can be played off the string in the opening section but with some horizontal length. For the eighth notes, the stroke is a controlled lift from the string, while the sixteenths are played with a springy brush stroke. The contrapuntal theme beginning in m.33 (violin 1) is stronger if the eighths are played with a martelé stroke in the upper half of the bow. For this bowing to be used the dotted quarter must always come on a down-bow.

Composer	Constantinides, Dinos.
Title	13. Tertian
Style	Post-tonal; tertian harmonies; modal or non-functional progressions; triads only—no dissonance!
Level of difficulty	Intermediate
Left hand difficulty	Double stops—intonation on P5ths, P4ths, also 3rds, 6ths, 8ves (consonant double stops only; no dissonance)
Right hand difficulty	
Other difficulties	
Value	Tertian harmonies without functionality; double stops; intonation work; applicability to Debussy and others
Musicality	Simple, instinctive phrasing
Meter	Mixed; quarter remains constant
Tempo	Allegretto; quarter = 88, 138
Rhythmic difficulty	Medium; various triplet subdivisions

Style: The striking aspect of this study is its absolute absence of harmonic dissonance. Such harmonic palates are rare in twentieth century music, yet the lack of dissonance and the non-functionality of the tertian harmonies make the language nontraditional. Despite these obstacles, the harmony (not the tonality) of A major finds a way to establish itself. The momentary resolutions in mm. 2 and 21 through D major are modal in nature. In the last five bars, the dominant harmony over the A-pedal is actually a minor, and, consequently, makes the final A major harmony resemble a picardy third.

Musicality: The phrasing is best interpreted in an instinctual way. The small phrasing gestures are clearly indicated by the composer. For example, the crescendo to *mf* from mm. 4-5 and the diminuendo that follows show an early high point in the line, and the subsequent crescendo to *f* in m. 7 eclipses the level of m. 4. The instinctive aspect of the phrasing also depends on the harmony. M. 21 is an echo of an earlier “resolution” to A major in m. 2. Certainly the players could afford to take time here (and in m. 49) in order to show this point of arrival. A subtle rubato, particularly a slight moving forward on the quarter triplets, seems appropriate for this style.

Composer	Constantinides, Dinos.
Title	14. Polychordal
Style	Post-tonal
Level of difficulty	Intermediate
Left hand difficulty	Chords—setting and intonation;
Right hand difficulty	Triple chords
Other difficulties	Ear training—two different tertian harmonies sounding simultaneously
Value	Twentieth-century ear training with traditional, but valuable, work for the hands; applicability to Stravinsky’s early music
Musicality	Phrases are clearly shown in the dynamic shapes
Meter	Mixed; quarter remains constant
Tempo	Allegro pesante; quarter = 126
Rhythmic difficulty	Medium; eighth, quarter, half triplet subdivisions

Style: Study No. 14 is similar to the previous study in its use of tertian harmonies. However, in No. 14, the two violins play different tertian harmonies a 3rd, P5th, or m2nd (semitone) apart. The result of these simultaneities is that each chord will have one or two notes in common and one or two notes which clash with dissonance. The chords are thankfully spaced widely enough so that the dissonances are not striking or clangorous to the ear. This makes intonation work on the common tones far simpler.

Left hand difficulty: The chords are comfortable to play in and of themselves; the challenge is to play them at quarter=126. The setting of the chords in the left hand is crucial. If the fingers are not placed securely before the bow starts to move, then the sound and intonation will suffer. The shifts from one chord to the next must be smooth, but they must also be practiced with increasing speed, since the tempo will eventually demand this. The shifts will not become jerky so long as they do not begin late or occur with excessive pressure in the fingers. As always, preparations are extremely important. At the end of one chord the mind, the fingers and the bow should already be in motion, hovering over the strings to play the subsequent chord.

Right hand difficulty: Aside from the chords in soft dynamics (*mp* and less), the triple stop chords should not be broken. On (long) dotted half notes and half notes within diminuendo, the lowest note of the chord may be released in order to preserve a good quality of tone. Otherwise, on the rest of the triple stops, three strings should be bowed simultaneously. As with the unaccompanied music of Bach, Ysaÿe, and others, triple stops are best managed by placing the bow closer to the fingerboard on the middle string of the chord; thus, with a small amount of pressure (weight), the outer strings are contacted by the bow when the middle string is depressed.

Composer	Constantinides, Dinos.
Title	15. Nontertian
Style	Post-tonal; quartal harmonies with a sense of function; [027]
Level of difficulty	Intermediate (violin 1); Difficult (violin 2)
Left hand difficulty	Intonation—intervals, harmonic and melodic: P4ths, P5ths, P8ves, m2nds, M7ths
Right hand difficulty	Awkward hooked bowings; string crossings; coordination—slurs mixed with off-the-string strokes
Other difficulties	
Value	Intonation work; 20th-century intervallic content; connections to quartal harmony in Ravel, Debussy, Hindemith, Messiaen, Copeland, others
Musicality	Intuitive, as with Nos. 13 and 14; the dynamic shape illustrates the phrase clearly; go with the line and give direction
Meter	Mixed; ♩ = ♩, difficult relationships, especially duple groupings in 7/8, 5/8; metric reorganization
Tempo	Allegro; quarter = 144
Rhythmic difficulty	Medium; the rhythms themselves are simple, but the relationships are complex

Style: “Post-tonal” is used in this case because, even though the harmonic structure is quartal rather than tertian, a sense of hierarchy and resolution (and thus functionality) does exist. For example, the downbeat of m. 5 sounds like a modal resolution, not only because of the melodic and dynamic shaping, but also from the sense of harmonic progression. Perhaps the motion of the outer voices in mm. 4-5 (D-G in the bass and C-D in the top voice) provides just enough of an outline of a V-I progression in G to make m. 5 feel like a point of arrival and resolution.

The harmonic language is much easier to describe than to classify. Most of the piece consists of harmonic and melodic P4ths and P5ths, with some m7ths and M2nds, which also happen to form [027] trichords. The quartal sonorities are often transposed by fourth melodically and harmonically, as well. Although they both used quartal chords, the result here is more reminiscent of some of Hindemith’s music rather than that of Debussy.

Left hand difficulty: Intonation is the prime concern in Study No. 15, due to the abundance of perfect intervals. Even the melodic P4ths are crucial, since, in this tempo, they overlap sonically and sound as chords. In fact, the melodic P4ths should be practiced individually as double stops to insure precise intonation. Preparations are especially important in places where the accidentals (and, hence the harmony) change because the position of the hand must be adjusted immediately *before* this change occurs. M. 42 in the first violin illustrates this. While playing G the hand should already be opening and extending back to half position to prepare for the following four notes (assuming that the player stays in first position).

Right hand difficulty: The separate eighths in such music are generally played off the string in the middle or the lower middle of the bow. This means that groups of three will sometimes have to be bowed down-up-up unless this group is part of a sequence of several groups of threes. The composer has marked some quarter plus eighth groups with a hooked bowing (down-down or up-up), which should be transferred to all such places except where a hook must be broken for technical or musical reasons. Refer to example 14, shown below. The second violin should change the bowing in mm. 75-77, and instead start down-bow in the middle—the difficult string crossings between the E- and G-strings will be more manageable in the lower part of the bow.

The musical notation for violin 1, measures 76-80, is presented in two staves. The top staff is in treble clef with a key signature of one sharp (F#). It contains a sequence of eighth and quarter notes, some with hooked bowings (down-down or up-up). The bottom staff is in treble clef with a key signature of one sharp (F#). It contains a sequence of eighth and quarter notes, some with hooked bowings (down-down or up-up). Dynamics include *f*, *mp*, and *cresc.* Bowing directions are indicated by 'v' (up-bow) and 'b' (down-bow) marks.

Ex. 14. Hooked bowings and bowings for irregular figures, violin 1, mm. 76-80

Rhythm and meter: The metric relationships are problematic even though the eighth note remains constant throughout. The tempo is fast, but one is lulled into a state of comfort by the treble organization of the 9/8, 6/8 and 12/8 meters. Then, at the appearance of 7/8, 5/8 and 8/8 meters, duple units are introduced. These duple groups, whether quarter or two eighths, feel surprisingly fast and, therefore, awkward for the mind and hands. The players are advised to work with a good metronome, which has the ability to give a fast eighth note pulse.

The second violin part is listed above as “difficult” in level, in part because of the rhythmic complexity of the passage from mm. 45-70. From mm. 45-51, the second violin plays complex rhythms in 6/8 while the first plays regular rhythms in 3/4 meter. In fact, what happens with the second violin part is metric reorganization; the accented notes change the organization of beats within the 6/8 (from 3+3 to 2+2+2 to 1+3+2, and so on). The result, when combined with the regular rhythmic organization of the violin 1 part, is a complex rhythmic counterpoint. The second violinist should spend some time with this passage doing mental work away from the instrument. Actually, the rhythm becomes quite easy if the player mentally removes the bar lines. Then all of the beats are grouped into units of two, three, or four. In this way, the downbeat of m. 47 is felt as the end of the three-group from m. 46, rather than an isolated downbeat followed by an offbeat accent. (In your head, count: 1,2,3-1,2,3,-1,2-1,2,3-1,2,3-1,2 in mm.45-47, and so on.)

Composer	Constantinides, Dinos.
Title	16. Twelve Tone I
Style	Serial (12-tone)
Level of difficulty	Intermediate
Left hand difficulty	Large leaps, entrances on high notes, extensions; glissandi; effects—senza vib., con vib.
Right hand difficulty	String crossings across three strings (sextuplet sixteenths)
Other difficulties	Ear training, 12-tone language
Value	12-tone style, a good introduction (like Bartolozzi “Pause,” since only one row form is used)
Musicality	Similar to other Expressionist works, emphasize contrasts of dynamics, timbres, etc.
Meter	Mixed, quarter remains constant
Tempo	None given
Rhythmic difficulty	Medium; uneven groups; ambiguous pulse

Style: Only one twelve-tone row form (P_2) is used throughout Study No. 16. The pitch classes of P_2 are as follows: D, F#, C#, C, G, B, A, F, B-flat, E-flat, A-flat, and E. The row is constructed in a Webernian style from [015] trichords. The pitch classes in order positions one, two, and three (D, F#, C#) form an [015] as do the pitch classes of order positions four, five, and six, and so on. This allows the composer to emphasize interval classes 5 (P4ths, P5ths) and 2 (m7ths, M2nds) in an immediately audible way. The first statement of P_2 unfolds clearly in mm. 1-2; violin 1 plays the first seven pitches (up to A) and the row is completed by violin 2 (E in m.2 is the last note). Additional statements of this same row follow. A final statement of the row appears to begin in the second violin in m. 19 but turns out to be a false entrance. The collection is missing the pitch class C#, and the order of the pitch classes changes from P_2 after B-flat.

Composer	Constantinides, Dinos.
Title	17. Twelve Tone II
Style	Serial (12-tone)
Level of difficulty	Intermediate (almost “Easy,” 1st-6th position, unusual intervals)
Left hand difficulty	Extensions
Right hand difficulty	Crossings with skipped strings
Other difficulties	Ear training, 12-tone language
Value	12-tone work with overlapping statements and five different rows, <i>slightly</i> more compositionally complex than No. 16 (but technically and rhythmically easier)
Musicality	Same Expressionist aesthetics as No. 16
Meter	4/4
Tempo	Quarter = 80
Rhythmic difficulty	Simple

Style: The same row from the previous study is used here in Study No. 17. (See Study No. 16 for a discussion of P₂’s construction.) In this study, the following row forms are used: P₂ (mm. 1-4, violin 1), R₄ (mm. 4-7), P₃ (mm. 7-9, violin 2), R₄ (mm. 7-11), I₂ (mm. 10-13, violin 2), R₄ (mm. 16-19). A secondary set appears in mm. 13-16 (G#, C#, F#, B, G, F, A, E, E-flat, B, flat, D, C) which also emphasizes interval classes 2 and 5. This study is more complex than the previous one in procedure as well. The rows overlap here as they typically do in the music of Schoenberg and his Second Viennese School pupils Berg and Webern. For instance, the E in m. 4 is the last note of P₂ and the first note of R₄. This technique is something akin to phrase elision in the music of many earlier composers, and Bach and Mozart, in particular.

Composer	Constantinides, Dinos.
Title	18. Twelve Tone III
Style	Serial (12-tone)/free atonal
Level of difficulty	Advanced
Left hand difficulty	Uncomfortable passagework with non-idiomatic writing; melodic skips; large leaps; intervals: P5ths, P4ths, M7ths, tritones; unprepared entrances on high notes
Right hand difficulty	Large, disjunct string crossings
Other difficulties	Ear training; ensemble togetherness
Value	12-tone and free atonal language; complex compositionally and technically for both hands
Musicality	Phrasing contrasts dialogue vs. unison playing; dynamic extremes
Meter	Mixed; sixteenth note remains constant; complex relationships
Tempo	Quarter = 104
Rhythmic difficulty	Medium, steady pulse with quarter triplets

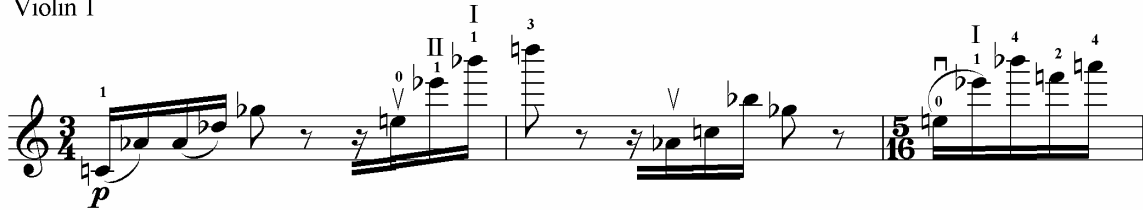
Style: Study No. 18 is more similar to Second Viennese School serialism in terms of pitch language than rhythm. Schoenberg and his pupils generally avoided any sense of steady pulse, whereas Constantinides composes, in this case, with a strong rhythmic energy. The metric complexity disrupts the regularity of the large quarter note pulse, but some feeling of pulse exists throughout. Constantinides also violates the strict expressionist principle of non-octave duplication (ex. m. 4, violin 2 holds F4 and violin 1 plays F5). The pitch serialism, on the other hand, is similar in style to the Second Viennese School composers.

The row in mm. 1-2 is the same P_2 used in Study Nos. 16 and 17. (See Study 16 for information about its construction.) Many other forms of the row appear in the piece, such as R_4 (violin 1, m. 4), I_4 (mm. 35-36), and RI_0 (mm. 21-22). Secondary sets also appear, as in mm. 23-24 (the D in m. 25 is the last note of the aggregate). Constantinides varies procedure in some places by changing the order position of a dyad. For example, the I_2 (violin 2, mm. 29-30) reverses the pitch classes, D# and A#. P_2 appears in mm. 30-

32 with certain pitches repeated around it, as well. Lastly, free atonality is used between row entrances, as in mm. 18-20.

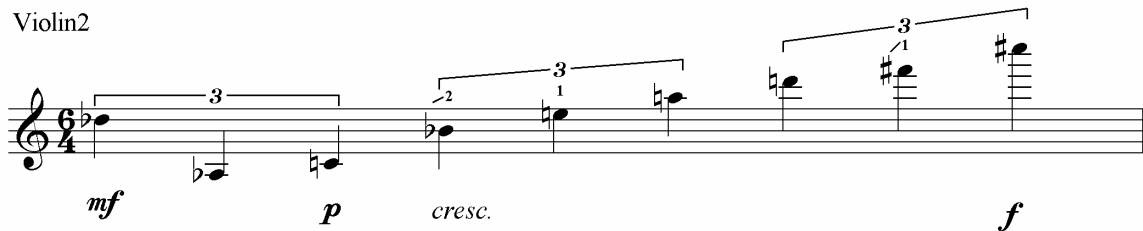
Left hand difficulty: The greatest challenge in the study is for the left hand. The row itself is disjunct in nature because of the emphasis on interval class 5 (P5ths and P4ths). Therefore, the melodic line tends to be unavoidably disjunct as well. The style dictates that smooth lines be avoided, since a note is still part of a row no matter what octave (register) it appears in. Two passages appear below with possible fingering solutions; the first is from mm. 21-23 (violin 1) and the second is from m. 40 (violin 2).

Violin 1



Ex. 15. Fingering, violin 1, mm. 21-23

Violin2



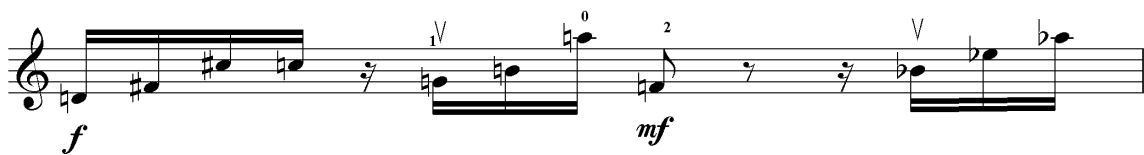
Ex. 16. Fingering, violin 2, m. 40

Right hand difficulty: Some of the disjunct lines lead to problematic string crossings. One example occurs in m. 34, beat 3-4 (violin 1). The fingering is important as a way to simplify the passage, since any unnecessary movements in the left hand or between strings will only make execution more difficult for the right hand. The fingering that seems to be the best is as follows: first finger on C#, third on C, open G, third on B. See this illustrated below in example 17. Also, play in the lower-middle part of the bow, and start moving the arm to the G-string while playing C on the A-string. Another similar

problem occurs in m. 1, beats 2-3 (violin 1); the solution is to begin in third position, play the A with a harmonic, and shift down to play F with the second finger. Example 18 provides another illustration of fingering.



Ex. 17. Fingering as a way to simplify string crossings, violin 1, mm. 34-35



Ex. 18. Fingering as a way to simplify string crossings, violin 1, m. 1

Composer	Constantinides, Dinos.
Title	19. Total Serialization
Style	Modernism; total serial (not strict total serialism, though similar in style and procedure)
Level of difficulty	Advanced (violin 1); Intermediate (violin 2)
Left hand difficulty	Passagework with large leaps (violin 1); double stops: P4ths, 7ths, 2nds, tritones, 3rds
Right hand difficulty	Wide variety of strokes articulations, effects, timbres, dynamics (col legno battuto, ricochet, sul pont., sul tasto, etc.)
Other difficulties	Mental: rapid and extreme changes of right hand strokes and effects, dynamics and accents, and pitch classes
Value	Serialist style and procedure;
Musicality	
Meter	Mixed; complex relationships; 3/8, 2/8, 2/4, 3/16, 2/16, 1/32, 1/4, 10/16, etc. (32nd note = 32nd note)
Tempo	♩ = 160
Rhythmic difficulty	Complex, especially from the changes of meter

Style: Study No. 19 is not composed in a strict total serialist manner as the title indicates. First, total serialism implies that all aspects of the composition are serialized, including pitches, rhythms, dynamics, registers, and so on. In this etude, only three elements are subject to serial procedures: pitch, meter, and dynamics. In addition, those

elements are not strictly serialized, themselves. For example, indirect pitch repetitions occur in the final two bars in both violin parts.

Dynamics are organized into a series of nine (rather than twelve) which appears in the first violin part in mm. 1-13. The series is as follows: *p*, *mp*, *mf*, *f*, *ff*, *fff*, *pp*, *ppp*, *sff*. Measures 1-11 also reveal the use of nine serialized meters (3/8, 2/8, 1/16, 2/4, 3/16, 2/16, 1/32, 1/4, 10/16). In mm. 15-30, the metric and dynamic series appear in retrograde from their original sequence. Measure 30 marks the return of the original row (P_3) with the metric and dynamic series in their original (prime) order. Interestingly, the first dyad of P_3 has been reversed from (E-flat, D) to (D, E-flat).

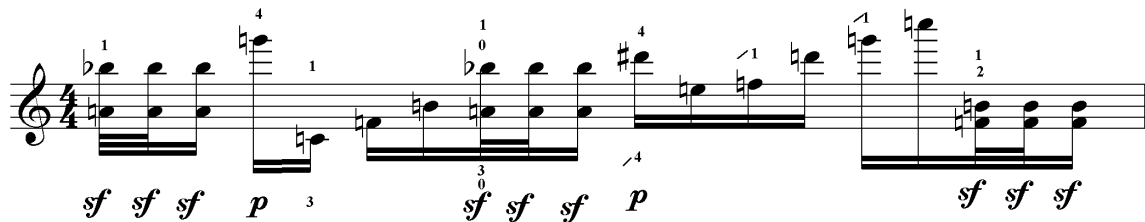
Modernist composers, such as Milton Babbitt and Pierre Boulez, followed a strict set of aesthetic criteria in their total serial compositions. Some of these criteria include serialization of rhythm and meter to remove any sense of regular pulse, serialization of pitch to create a constant flow of new aggregates, and a general lack of repetition. The study is mostly serial but does contain free repetition of pitches (ex. mm. 16-17, 48-49). More importantly, the rhythm has moments of regularity with homophony between the two violins and a strong sense of pulse (ex. mm. 15, 18-20, 44-49). The twelve-tone row is constructed trichordally ([015], [015], [016], [016]) and the original row, P_3 , contains the pitch classes (E-flat, D, G, C#, G#, A, C, F, F#, B, E, B-flat).

Left hand difficulty: Two passages for the first violin are especially challenging—mm. 42-43 and m. 48. The following fingerings are presented as possibilities—see examples 19 and 20, shown below. The shift to F-natural in m. 42 should be played by the third finger on the A-string, not the D-string. In example 20, the

G6 in beat 1 should be played with a fourth finger extension (not a shift) to avoid consecutive shifts.



Ex. 19. Fingering, violin 1, mm. 42-43



Ex. 20. Fingering efficiency and shifts on accented beats, violin 1, m. 48

Right hand difficulty: The shift to B-natural on the A-string leading into m. 43 will be facilitated by freedom of movement in the bow. See example 19, shown above. Thus, the right hand must connect the up-bow at the end of m. 42 to the down-bow of m. 43 by not stopping the movement during the bow change. The player should practice with the bow on open strings during mm. 42-43 with the following in mind: watch the placement of the bow while changing from “ord. to sul pont. to ord.,” and connect the up-bow to the down-bow (as described above) without losing the ponticello timbre and without making crescendo. In this way, the surprise of the *sf* in m. 43 and the timbral contrasts can be mastered without the complication of the left hand workings.

Rhythm and meter: The rhythm is highly complex as a direct result of the relationships between various meters. To make matters worse, the most useful device for rhythmic work (the metronome) is unusable in many parts of the piece. The irregular meters like 3/16 and 1/32 change the placement of the pulse so that what follows is not

synchronized with the metronome. However, the metronome can be used so long as the players practice and rehearse small sections. The metronome work on rhythm and meter should begin at approximately half speed (♩ = 80), since an excessively slow tempo will not allow the mind to process information in the metric context. The rhythms will become isolated events.

Composer	Constantinides, Dinos.
Title	20. By Proportion I
Style	Free atonal, with aleatoric indeterminacy of performance
Level of difficulty	Intermediate
Left hand difficulty	Large leaps, high notes (free and notated); glissandi: connected, staccato, with M7ths; slow 1/4 tone vibrato; figures “as fast as possible”; l.h.pizz
Right hand difficulty	20th century effects: held tones, irregular strokes, sub ponticello (behind bridge), saltando, fast non-rhythmicized tremolo, col legno battuto; chords broken high to low (↓)
Other difficulties	Notation (requiring estimations) duration, free pitches
Value	Extended playing techniques; indeterminate held-note notation; indeterminacy; applicability to Polish School, NY School, others
Musicality	Clear phrase breaks; dialogue vs. isolation
Meter	4/4
Tempo	Quarter = ca. 120
Rhythmic difficulty	Medium; unusual notation; very free approach

Style: The piece is composed traditionally but with some indeterminacy of notation, which leaves certain elements up to the performer. The player must decide ahead of time what to play or improvise on the spot. In this type of “controlled choice situation” certain elements are provided and others are not.¹⁷ For instance, in mm. 32-36 pitches, dynamics, timbres, and note lengths are given, and rhythmic timing must be estimated visually (based on the given pulse of 120 bpm and the relative location within the measure of the rhythmic event). In mm. 45-48 some pitches, intervals (M7ths),

¹⁷ Eric Saltzman, Twentieth- Century Music: An Introduction, 3rd ed., (New Jersey: Prentice Hall, 1988), 161.

dynamics, and contours are given, while actual pitches in glissandi and the speed and timing of separate strokes must be left somewhat to chance.

Value: The aleatoric aspect of this work makes it directly applicable to works by John Cage, Morton Feldman, Earle Brown, Witold Lutosławski, Krzysztof Penderecki and others.

Musicality: The phrasing is sometimes isolated (ex. mm. 32-36), other times conversational (mm. 41-44). The beginnings and endings are shown clearly by vertical lines and silence. For example, m. 22 contains a clear phrase break where both violins cut off together at a *fff* dynamic. Additional breaks occur in mm. 64 and 132.

Composer	Constantinides, Dinos.
Title	21. By Proportion II
Style	Free atonal with aleatoric indeterminacy of performance
Level of difficulty	Intermediate
Left hand difficulty	Synthetic scales; free pitches in contour notation
Right hand difficulty	Effects: sul pont., col legno battuto, fast non-rhythmic tremolo; triple stop held notes and tremolo; ricochet stroke
Other difficulties	Mental: ensemble, rhythmic timing, improvising; coordination
Value	Applicable to aleatoric works (see list in Study No. 20); synthetic scales ([01268])
Musicality	Dialogue between two instruments; clear phrase/section breaks (mm. 47, 63, 126, 136, and certainly others may be decided upon)
Meter	Mixed; quarter remains constant
Tempo	Quarter = ca. 120
Rhythmic difficulty	Medium; unusual notation; very free approach

Style: Study No. 21 “By Proportion II” is very similar to its counterpart “By Proportion I.” Both are examples of a free atonal style with “indeterminacy of performance.”¹⁸ Some new elements are introduced in this study in terms of material, notation and procedure. Synthetic scales make up some of the new material and appear in

¹⁸ Bryan R. Simms, Music of the Twentieth Century: Style and Structure, (New York: Schirmer, 1986), 357.

the first violin part in mm. 133 and 135 (and both parts in mm. 153-154). These collections could be described as [01268] pentachords, but “synthetic scale” seems a more appropriate label given the stepwise, melodic nature of the pitches (G#, A, B-flat, D, E, G#, etc). As mentioned in the “general remarks about the collection,” the C# in m. 135 should be changed to D#. This particular pentatonic scale is also reminiscent of Eastern melodies, and therefore adds an element of exoticism to the piece.

A notation that appears frequently in music of the latter part of the twentieth century also appears in this study. Beginning in m. 40, figures are shown inside a box with the remark “repeat at will.” In this case, pitches, rhythms, and dynamics are given; only the entrance of each figure is left up to the performer. In m. 61 players are given some pitches, rhythms and the dynamics, and are asked to improvise certain rhythms, “free pitches,” and timing of entrances. Other works, such as Centering for Violin and Orchestra by Earle Brown, contain passages that strongly resemble the latter example. Usually some elements are provided while others are left up to the player. A collection of pitches might be presented with direction to provide rhythm, duration, dynamics, timbre contrasts, changes of register, and so forth. Procedural changes are also discussed in “other difficulties” below. This study notates some measures with specific rhythmic values and specific metric placement; this type of material appears together in both parts and in combination with graphically notated and arrhythmic figures.

Other difficulties: Coordination is problematic for certain awkward slurred figures and figures to be played “as fast as possible.” For example, the second violin has such a slurred figure in m. 94. The tendency is to play this group unevenly, so practice slowly for the timing of the string crossing and the lifting and dropping of the fingers. In

particular, make sure that the D is clearly audible. Measures 25-26 (violin 2) contain an example of “as fast as possible” figures mixed with written figures. A small amount of bow should be used for these fast figures. The stroke should begin from the string and be produced with the hand, not the entire arm to ensure good coordination. Rhythmic crescendo notation also appears (as in Rochberg’s Caprice No. 46 and other works) in this study.

Ensemble is also more challenging in this study than in the previous one. The dialogue is more rapid and complex here because more events occur in a smaller amount of time and because notated rhythms and non-notated ones appear in combination. In mm. 129-130, for instance, the first violin plays regular rhythms while the second violin estimates graphically notated durations. The parts must line up as much as possible, and the responsibility naturally falls on the “estimator” (the second violin in this case) to see that this happens.

Composer	Constantinides, Dinos.
Title	22. Beginning Dancing Lessons
Style	Free atonal; [0123] written as a cluster of overlapping M2nds used throughout
Level of difficulty	Easy
Left hand difficulty	
Right hand difficulty	
Other difficulties	
Value	Rhythmic/metric training (especially violin 2); dissonance
Musicality	One phrase
Meter	Mixed; ♩ remains constant
Tempo	Quarter = ca.92
Rhythmic difficulty	Simple (violin 1); medium (violin 2)

Rhythm and meter: The title “Beginning Dancing Lessons” is somewhat ironic given that the irregular meters and shifts between meters make dancing to this music impossible. “Dancing” also humorously refers to the semitone relationships and rhythmic

interplay between the two parts. Although both parts are classified as “easy,” the second violinist certainly has the more difficult task. The first violinist plays continuously until m. 19, while the second violin’s line is constantly interrupted by rests of differing lengths within changing meters. The second violin also has changing dynamics against the *mf* stasis of the first violin. (The composer points out that the gradual diminuendo from mm. 1-9 in violin 2 symbolizes that player’s physical and mental exhaustion.)¹⁹

Again, due to the irregular meters, using a metronome will be challenging. The second violinist should practice with combinations of verbalization, walking, tapping, and conducting. For instance, march in place (while looking at the music) in eighth notes (♩ = ca.104), alternating the left and right feet. At the same time, speak “ta” and “ta-ta” for single and duple groups. Measures in 5/8 should be organized as two plus three (1-2, 1-2-3) to align with the first violin’s accents. Therefore, the right foot (assuming the left starts) will be held an extra eighth in 5/8. Then add other elements like right arm movement, which plays the notes being verbalized in the air with the correct bowing. Once the second violin has mastered his /her part, the two parts can be slowly rehearsed together.

¹⁹ Constantinides, 2004.

Composer	Constantinides, Dinos.
Title	23. Clusteritis; the title as “Clusteritis,” but is a mistake according to the composer. The title is actually a joke—clusteritis is a fictitious cluster disease (as in meningitis or tonsillitis).
Style	Free atonal; [0123] and [01] in general dominates vertical and horizontal
Level of difficulty	Intermediate
Left hand difficulty	Fast chromatic groups, ascending and descending; left hand pizz. with arco; intervals: 2nds, major 7ths (in double stops), the parallel 2nds (vln. 2, m. 9) should be played like octaves (with a stable framework in the hand)
Right hand difficulty	Effects: changing bow placements from sul tasto → ord., sul ponticello → ord.
Other difficulties	Ear training: maintaining independence amid harsh dissonance
Value	Practice with clusters, harsh harmonic dissonance
Musicality	Combination of traditional and Expressionist ideals
Meter	Mixed; quarter remains constant
Tempo	Quarter = 60
Rhythmic difficulty	Medium

Musicality: Traditional and Expressionist ideals are represented in the musicality of the piece. Direction should be given to certain gestures and melodic lines. In m. 3, the four thirty-second notes should lead to the following eighth. The eighth is made the arrival point of that gesture by a slight crescendo and a very subtle forward motion (not to be confused with rushing). The Expressionist aspect concerns the sudden changes of dynamic and timbre, which can be brought out almost to the point of exaggeration.

Composer	Constantinides, Dinos.
Title	24. The First Kiss
Style	Post-tonal; mostly, sequential pandiatonic collections played a semitone apart harmonically (comically referred to by the title)
Level of difficulty	Easy
Left hand difficulty	
Right hand difficulty	
Other difficulties	Ear training: independence of intonation while playing in semitones
Value	Harmonic dissonance using exclusively m2nds
Musicality	Traditional phrasing; give direction where appropriate
Meter	Mixed; quarter remains constant
Tempo	Quarter = 120
Rhythmic difficulty	Simple

Composer	Constantinides, Dinos.
Title	25. Conversations
Style	Free atonal; contrasting interval class content in various sets, ([0126], [027], etc.); indeterminacy of performance
Level of difficulty	Advanced
Left hand difficulty	Unprepared entrances on high notes; challenging fast leaps (sixth system)
Right hand difficulty	String crossings across 3-4 strings in slurs, down and up bow
Other difficulties	Notation: same graphic notation for held tones used in “By Proportion I, II”; Coordination: slurred figures; Counting fast repeated notes
Value	Challenging rhythmic training with visual estimation, rhythmic cresc. and dim. with varying groups; coordination work
Musicality	Dialogue, conversation between violins; fragmented gestures “bouncing” back and forth between instruments
Meter	None
Tempo	None
Rhythmic difficulty	Complex; unusual notation; visual estimations; rhythmic cresc. and dim. with varying groups

Rhythm and meter: Before beginning work on this study, take the time to write a number above or below large groups of repeated notes, indicating the number of notes in that particular group. Also, write in bowings for the first and/or last notes of these repeated figures. The learning process will be greatly expedited by this simple step. The held note notation is slightly subjective in certain places. The players must judge visually

the relationships between the termination of held notes and entrances by the other player. In general, if the horizontal line appears to continue up to (but not past) an entrance by the other player, then the held note should continue until the entrance occurs, with a very slight overlap of sound. This study is similar to Nos. 20 and 21 (“By Proportion I and II”), except with a greater degree of indeterminacy and no meter.

Composer	Constantinides, Dinos.
Title	26. Free Pitches and Vocal Sounds
Style	Modernism; aleatoric elements; pitches are absolutely undetermined, except in terms of approximate contour and range (indeterminacy of performance with contour notation)
Level of difficulty	Intermediate
Left hand difficulty	Free pitches with contour notation and relative register
Right hand difficulty	Scordatura tuning, the open strings are tuned to G#, D, B-flat, F (a fact more than a difficulty)
Other difficulties	Notation; mental work for multiple tasks (reading notation, producing vocal sounds, improvising free pitches, counting seconds) simultaneously
Value	A good study of graphic notation and “pure” aleatoric style; training for convincing improvisation within parameters
Musicality	Continuous phrasing, clearly illustrated by dynamic shaping; a certain amount of rubato (beyond the indications) will help figures sound spontaneous
Meter	None
Tempo	None (notation in seconds) 15” per system = 60” total
Rhythmic difficulty	Complex; players must keep track of time in seconds and spread out the events of each system in the allotted 15 sec.

Other Difficulties: As with the previous study, players should mark numbers above or below rhythmic figures to indicate the number of separate articulations. For instance, the first entrance of the first violin should be labeled as 9+8, meaning that nine free pitches with contour are followed by eight repeated high pitches. A possible bowing for the figure would be to start down and play two “hooked” up bows (down-up-up) just before the group of eight.

Musicality: A sense of freedom and spontaneity is crucial to the success of such pieces. These inventions of free pitches and rhythms must not sound too spontaneous, however. Follow the example of great jazz musicians who practice solos for particular tunes ahead of time. Some plan out the entire solo, while others work out a structure with certain musical ideas. All of the great ones remain open to creativity and “happy accidents” on stage, but none would perform without practice or thought about the improvisations.

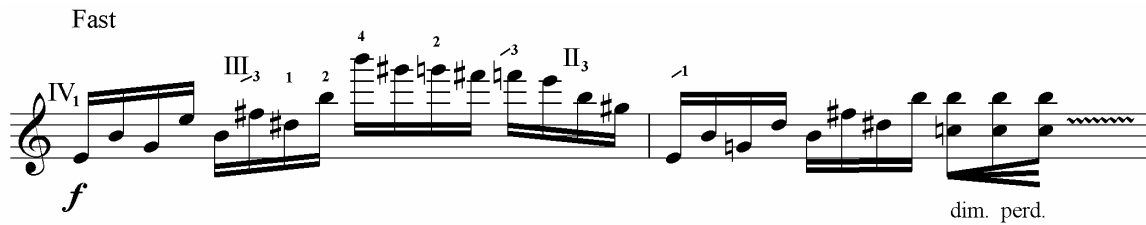
Pieces with indeterminacy have the tendency to sound unconvincing unless the performers have practiced expressing ideas within the given parameters. Surprisingly, the left hand (controlled by the mind), given the freedom to choose pitches, becomes paralyzed by the possibilities, and the right hand begins to show signs of timidity. The preconditioning that “faking” is wrong is deeply engrained in the subconscious of the violinist, and thus the player must practice by making specific decisions about pitches and rhythmic timing. Incidentally, this preconditioning about faking does not exist in all violinists, though it should, and thus some violinists may find this type of improvisation quite easy. However, improvising notes out of tune is to be avoided unless a conscious, well-planned decision has been made to play with microtonal inflections on specific notes. In rehearsal or performance, the players should remain open to spontaneity, but the basic shapes and ideas should already be in place.

Composer	Constantinides, Dinos.
Title	27. By Arrangements
Style	Free atonal with indeterminate, mobile form—nine composed “cells” are performed in random sequence
Level of difficulty	Intermediate
Left hand difficulty	Large, fast leaps; intervals: (melodic and harmonic) P5ths, tritone, 7ths, 2nds; Bartok pizz.
Right hand difficulty	Rapid string crossings repeated between two strings; effects: ponticello, saltato
Other difficulties	
Value	Aleatoric elements (applicability to circular scores in music by Karlheinz Stockhausen, also later works of Boulez, etc.); left hand technical work
Musicality	Traditional phrasing; brief shapes and gestures; fragmented
Meter	Mostly 4/4
Tempo	Changing (moderate, fast, slow)
Rhythmic difficulty	Simple

Style: The study consists of nine “cells” which are to be performed at random by both violins. The composer instructs the performers to start with the center cell (first violin begins alone), and proceed to other cells at random. Each cell must be played at least once by each performer. Therefore, the compositional elements are fixed, but the form and interaction (harmonic, rhythmic, etc.) between those elements are undetermined. Four of the cells are real, not tonal, transpositions of one another. These cells are located north, south, east, and west of the center cell. North and south cells are related by fifth (A-E), as are east and west (E flat-G#).

Left hand difficulty: The melodic P5ths and fast leaps in the north, south, east, and west cells are challenging. The south cell, in particular, because of its high range and octave leap, requires some practice and a good fingering. One fingering possibility is given in example 21, below. With respect to the shift to F#5 on beat 2 of the first measure, some players may find that the most successful interpretation of this fingering involves shifting with the old finger on the old bow. Thus, begin the shift during the

down-bow, slide with the first finger, and drop the third finger upon arrival in seventh position.



Ex. 21. Fingering, “south” cell

Composer	Constantinides, Dinos.
Title	28. Monotonia in C – Consonance
Style	Post-modern; minimalism (repetition and “phase shift” for second violin)
Level of difficulty	Easy
Left hand difficulty	
Right hand difficulty	Possible practice of collé stroke (smooth, rounded articulation performed only with fingers and hand—no arm movement)
Other difficulties	Mental: both players must retain temporal independence during the gradual “phase shift”
Value	A good introduction to minimalism, simple technical requirements; applicability to minimalist literature by Philip Glass, John Adams, Steve Mackey, and especially Steve Reich
Musicality	Non-traditional; static; the interest comes entirely from the gradual rhythmic and dynamic procedure
Meter	4/4
Tempo	Quarter = 60, 120
Rhythmic difficulty	Simple (violin 1); medium (violin 2) very gradual accel. and rit.; phase shift

Composer	Constantinides, Dinos.
Title	29. Paraphrase of Monotonia in C – Dissonance
Style	Post-modern; minimalism (repetition and “phase shift” for second violin)
Level of difficulty	Easy
Left hand difficulty	
Right hand difficulty	Possible practice of collé stroke
Other difficulties	Mental: both players must retain temporal independence during the gradual “phase shift”; dissonance adds an extra complication requiring aural independence
Value	A good introduction to minimalism, simple technical requirements; applicability to minimalist literature by Philip Glass, John Adams, Steve Mackey, and especially Steve Reich
Musicality	Non-traditional; static; the interest comes entirely from the gradual rhythmic and dynamic procedure
Meter	4/4
Tempo	Quarter = 60, 120
Rhythmic difficulty	Simple (violin 1); medium (violin 2) very gradual accel. and rit.; phase shift

Composer	Constantinides, Dinos.
Title	30. Monotonia by thirds
Style	Post-modern; minimalism; post-tonal; melodic triads and 7th chords, harmonic counterpoint mostly in 3rds and P5ths
Level of difficulty	Easy
Left hand difficulty	
Right hand difficulty	
Other difficulties	Composer’s instructions
Value	Multi-media aspect; “special instrumental effects;” improvisation; free beat and dynamics; application to minimalist works (Lukas Foss)
Musicality	“Free beat and dynamics”
Meter	None
Tempo	“Free beat”
Rhythmic difficulty	Simple; sixteenth notes fragmented by rests

Style: This study is an extension of the preceding minimalist studies (Nos. 28 and 29). The performers may or may not choose to line up the parts at various points (system one, beat four and the beginning of system two, for instance). The performance notes listed below in “other difficulties” give an indication as to the extent of freedom and

improvisation asked of the performers. Constantinides also spoke of this etude in relation to Lukas Foss' Baroque Variations.²⁰ The third movement, in particular, uses material from J. S. Bach's "Preludium" from the Partita in E major for unaccompanied violin, BWV 1006; the players are instructed to play the quoted material with free beat, in any tempo, and so forth, so that each performance of the work is unique.

Other difficulties: The composer's performance instructions are as follows: "1. Employ infinite number of violins at will with free beat and dynamics; 2. Employ infinite number of any kind of thirds derived from starting point the lowest G; 3. Spaced instrumental groups may be employed, also light effects, also different intervals or special instrumental effects."²¹

Composer	Constantinides, Dinos.
Title	31. Design I – Abstract
Style	Modernism; aleatoric elements (purely graphic notation)
Level of difficulty	Indeterminate (as easy or as difficult as the performers choose)
Left hand difficulty	
Right hand difficulty	
Other difficulties	Notation
Value	Abstract graphic notation; improvisation within abstract parameters; applicability to Cage, Feldman others in NY School
Musicality	"Style of improvisation should be agreed upon prior to performance" according to the composer's instructions
Meter	None
Tempo	None
Rhythmic difficulty	Indeterminate

Other difficulties: The first challenge to the performers in this study is notation. Very little information is provided by the composer, and what is provided is intentionally vague. This continues, to even greater extent, the chance elements of Part C of the

²⁰ Constantinides, 2004.

²¹ Dinos Constantinides, Twentieth-Century Studies for Two Violins, book II, (Baton Rouge: Magni, 2001), 38.

collection (Studies 25-27). Here the aleatory is more extensive, since the composer only provides loose outlines for melodic contour, range, form and style. Performers may find some comfort in the fact that the visual element of the piece is to be taken quite literally. This, at least, provides some structure and guidance to an otherwise daunting situation.

With this in mind, the first violin begins in the top left (marked “I”). The player should begin in the highest possible range (indicated by the G-clef symbol) and follow the contour of the top line (reading from left to right), which begins to drop into a slightly lower range about halfway across. Obviously, the player is free to play any pitches, rhythms, styles, articulations, effects, and so on, while following this visual shape.

During rehearsal, performers should discuss the element of timing. In order for the structure of the piece to make sense, the players should proceed at approximately the same pace. Therefore, if the above-mentioned horizontal line (before the drop) is about four inches in length, then the players should agree on the length of time need to traverse this distance. In this way, in similar fashion to Mozart’s famous invertible duet, the players will cover the same musical ground (in this case) in retrograde.

Composer	Constantinides, Dinos.
Title	32. Design II –Antiviolin
Style	Modernism; aleatoric elements (performance indeterminacy within controlled parameters)
Level of difficulty	Intermediate: wide variety of effects
Left hand difficulty	Effects: molto vib., senza vib., pizz. gliss. with molto vib., tapping of open strings; fast indeterminate pitches
Right hand difficulty	Effects: saltato, col legno battuto, sub ponticello (behind bridge), chords from high to low (↓)
Other difficulties	Notation (reading four staves simultaneously)
Value	Indeterminacy; a plethora of twentieth century instrumental effects; applicability to eclectic and aleatoric works
Musicality	Emphasize contrast between timbres and dynamics
Meter	None
Tempo	Notation in seconds; 30" per stave = 60" total
Rhythmic difficulty	Indeterminate

Style: This study, which is a counterpart of No. 31 (“Design I”), is highly indeterminate and aleatoric in style. Structurally, as with the previous study, the violins are related by retrograde. This study is also palindromically designed (the two systems are mirror images of one another), so that the violins will actually end up playing in canonic imitation five seconds apart.

Other difficulties: Notation is challenging in this study. The four strings are printed with a vertical line at the beginning of each system. The placement of a pitch within a specific register is based on its visual location on this vertical axis. Thus, the first pizzicato chord in the score contains four pitches (one on each string), each of which appears in a low position on the violin. This study also provides an excellent context for perfecting a wide range of extended instrumental effects.

Attention should be paid to the quality and appropriate exaggeration of each sound effect. For example, the “pizz. glissando with molto vibrato” figures are difficult to play well (especially in higher positions); the player must use considerable pressure in the left hand finger in order to maximize the effect of the glissando. Some supplemental information about the composer’s indications may also be helpful. “7. Tapping of open strings” is to be performed with the left-hand fingers in a flattened out position (as if tapping someone on the head) and “11. tap the violin with hand” indicates that the performer should tap the *body* of the violin with either hand.

Composer	Constantinides, Dinos.
Title	33. Grand Finale- Return to Music
Style	Post-tonal/free atonal
Level of difficulty	Intermediate
Left hand difficulty	Glissandi with large leaps; double stops in 2nds
Right hand difficulty	Ricochet figures and hooked bowings must be played evenly; sul tasto; sul pont.
Other difficulties	Ensemble work, with complex rhythmic relationships, ties, challenging left and right hand effects and passagework
Value	Effects like glissandi, ricochet; wide variety of pitch material
Musicality	Continuous phrasing; refrain established in mm. 1-2 returns throughout the piece; contains a wide range of characters, dynamics and timbres
Meter	Mostly 4/4
Tempo	Quarter = 132
Rhythmic difficulty	Complex; combinations of 3 against 2, 6:3, 6:4

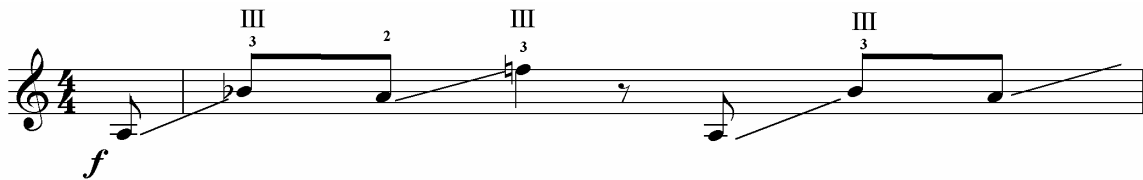
Style: The pitch material is somewhat of a culmination of materials from the previous studies and includes a combination of major and minor harmonies and collections, modes (Phrygian, mm. 60-62), dissonant clusters (mm. 33-34), and two trademarks of Constantinides' style, the chromatic scale (thematic) and atonal sets such as [0147] (violin 2, m. 4). Thus, in the end, all styles, techniques and trends are combined into a pluralistic language in which all material is equally important and viable. The formal structure is illustrated by example 22, shown below.

A	A'	B (Poco meno)	A	Coda
mm. 1-22	23-32	33-46	47-68	69-82

Ex. 22. Form chart

Left hand difficulty: Fast chromatic runs appear in this piece, and, for clarity, the fingering used in Carl Flesch's Scale System is best. Rather than slide on each finger, play consecutive fingers and shifts (ex. 1-2-1-2-3-4-0). Large glissandi appear frequently in this study. The fast tempo makes them challenging to execute, especially when they

appear in rapid succession. Avoid performing the glissandi with one finger. Instead, start the glissando on a lower finger and end on a higher finger whenever possible. For example, in the pickup to m. 9, the second violin should play in the following sequence: first finger on A-natural; slide mostly on the D-string with the third finger; land on B-flat with the third finger; play second finger on A-natural; slide with second finger, then take over with third finger; land on F with third finger (D-string). This sequence is illustrated in example 23.



Ex. 23. Fingering for fast, consecutive glissandi, violin 2, m. 9 (with pick-up)

Right hand difficulty: The ricochet figures present a certain difficulty. Play them just above the middle and expend very little bow. In addition, the triplets which precede the sextuplet ricochet figures should always begin on an up-bow (up, down, up); this bowing is much more fluid than playing (down, up, up) on the triplet, which tends to push the ricochet figures towards the lower half of the bow. See example 24.



Ex. 24. Bowing fluency with ricochet, violin 1, m. 8

Henze, Hans Werner

Étude philharmonique für Violine Solo (1979)

Composer Biography

German composer Hans Werner Henze (b Gütersloh, 1 July 1926) is well known for his numerous operas, ballets, symphonies and concertos. He studied piano Ernst Schacht and Thuillien harmonic theory with Rudolf Harting. Later he would study composition with Wolfgang Fortner, who taught him Fuxian counterpoint, score reading, instrumentation and music history. As a boy, Henze's family was subjected to the political and social pressures of the Nazi regime. He detested fascism, the Nazi regime and the war, but he was nevertheless conscripted. He served as a radio officer and a maker of military training films. The public and personal shame that he felt as a result of these activities influenced his musical output long after the war was over.

After hearing the violin concertos of Berg and Bartók he set out to write his own; he made a conscious decision to abandon his neo-Classical beginnings in order to explore the possibilities of serialism. The first movement of his First Violin Concerto contrasts a twelve-tone theme with a folk-like melody in A Lydian. The opening theme of the third movement is harmonically bitonal, and illustrates the influence of Stravinsky's melodic and harmonic language. The Second Violin Concerto (1971) is a theatrical commentary on Enzensberger's *Hommage à Gödel* and includes a bass-baritone part and a tape. The Sonata for Solo Violin (1976–7, rev. 1992) is the first of a series of works based on Monteverdi's *Orfeo*.

Henze was the first of the younger German composers to embrace serialism and the first to reject it. He found the method constricting, and thus began to incorporate tonal

elements with dodecaphonic ones. His mature style actually represents a blending of “exotic folksong elements, protest songs, touches of Weill and Dessau, standard dances, marches, light opera, cabaret and popular traits of ‘classical’ music with contemporary features such as 12-note writing [serialism], extended instrumental techniques, aleatory passages and controlled improvisation.”²⁵

Works with Violin

Violin Concerto no.1, 1947; Fantasia, str, 1966, arr. str sextet, 1966 [from film score *Der junge Törless*]; Violin Concerto no.2 (H.M. Enzensberger: *Hommage à Gödel*), B-Bar, vn, 33 insts, tape, 1971, rev. 1991; *Il Vitalino raddoppiato*, chaconne, vn, chbr orch, 1977 [based on chaconne by T. Vitali]; *Deutschlandsberger Mohrentanz* no.1, 4 rec, gui, perc, str qt, str, 1984; Sonata, vn, pf, 1946; String Quartet no.1, 1947; Kammer Sonata, pf trio, 1948, rev. 1963; String Quartet no.2, 1952; *Quattro fantasie*, cl, bn, hn, str qnt, 1963 [from 1963 version of *Kammermusik* 1958]; *Der junge Törless*, fantasia, str sextet, 1966 [arr. of Fantasia, str]; String Quartet no.3, 1975–6; String Quartet no.4, 1976; String Quartet no.5, 1976; Sonatina, vn, pf, 1979 [from op *Pollicino*]; Sonata, fl, cl, vn, vc, perc, pf, 1984 [from film score *L'amour à mort*]; *Allegra e Boris*, vn, va, 1987, unpubd, *Fünf Nachtstücke*, vn, pf, 1990; *Paraphrasen über Dostojewsky* (Bachmann), actor, fl, cl, bn, tpt, trbn, perc, pf, str qt, 1990 [from ballet *Der Idiot*]; *Adagio adagio*, serenade, vn, vc, pf, 1993; *Neue Volkslieder und Hirtengesänge*, bn, gui, str trio, 1996 [from musical play *Ödipus der Tyrann*]; *Etude philharmonique*, vn, 1979; *Serenade*, vn, 1986; *Trio*, vn, va, vc, 1998

²⁵ Virginia Palmer-Füchsel, *The New Grove Dictionary of Music and Musicians*, ed. Stanlie Sadie (London: Macmillan Publishers Limited, 2001), 11 : 392.

Composer	Henze, Hanz Werner.
Title	<u>Étude philharmonique</u> für Violine Solo
Style	Atonal/post-tonal
Level of difficulty	Advanced (chords, double stops, harmonics, unusual intervals)
Left hand difficulty	Intervals (melodic and double stops): 7ths, 9ths, P4ths, P5ths, 6ths, 3rds; harmonics at the 4th, 5th and double stops; left hand pizz.; glissandi
Right hand difficulty	Variety of articulations, strokes, styles, string crossings, dynamics, chords
Other difficulties	Ear training: large dissonant intervals contrasted with perfect intervals; Coordination (ex. m. 37)—place finger before bow moves
Value	A thorough exploration of 20th-century intervals and intonation work within atonal and post-tonal writing
Musicality	Some traditional phrasing indicated; Expressionist sentiments present as well
Meter	Mixed; none given
Tempo	Half note = ca. 80
Rhythmic difficulty	Medium; triplets, quintuplets, sextuplets, various groupings

Style: The G minor harmony and the pitch “G” are emphasized periodically throughout the etude. Overall, however, the language is certainly not tonal. G and g minor are established through repetition, centering, brief tonal progressions, and melodic collections. These procedures are illustrated in mm. 1-7. In m. 1, G is repeated and framed (loosely, since A is a whole step from G) by F# and A. Although the g minor centricity is undermined by the A-flat in m. 5, the end of m. 6 contains the melodic progression on scale degrees (flat) 3, 2, 1 to firmly reestablish the tonality. The opening also illustrates the consistent use of dissonant melodic intervals, especially 7ths and 9ths. After a departure where harmonic P5ths and P4ths are stressed (mm. 9-16), g minor is framed and reasserted in mm. 17-18. Measures 21-22 contain a brief V-i tonal progression in the “tonic.”

The B-section (marked “*liberamente*” at m. 31) is without meter and mostly without bar lines. It strays far from the g minor palette until the *ffff* accented harmonics, where the tonality slowly begins to return. Meter returns near the end along with the P4ths and P5ths. G and g minor are again emphasized by all of the means described above: brief tonal progressions, repetition, centering and melodic motion.

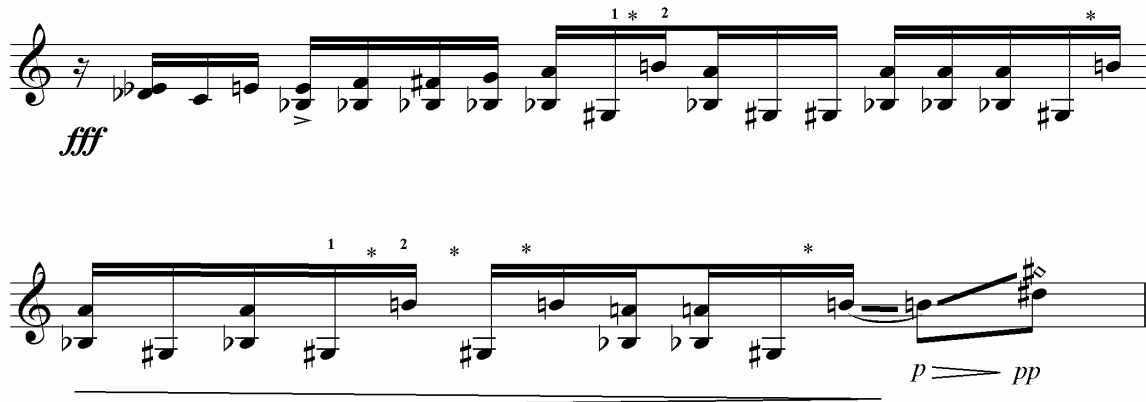
Level of difficulty: Ear training is challenging for the large, dissonant intervals contrasted with perfect intervals, and dissonance (melodic and harmonic).

Left hand difficulty: The use of harmonics in this study elevates its level to “advanced.” They occur in the following varieties: at the fourth, m. 34 (which should be played as artificial harmonics starting with the first finger on G on the D string); at the fifth (mm. 33-35); double stop harmonic plus normal tone, (p.3 line 6); double stop harmonics (p.3, line 7). The last two of these (from *ffff* in “*liberamente*”) are particularly challenging. With harmonics of this nature remember to press the stopped fingers down firmly to the fingerboard; also draw the bow slowly and close to the bridge. Some violinists speak of finding a groove with the bow—that place near the bridge where the harmonic speaks best. The optimal location is not always as close as possible to the bridge and varies with different harmonics, strings and instruments. The player then needs only to keep the bow in the groove. For the extremely difficult double stop harmonics with the tritone E, B-flat in the last mentioned *ffff* passage, the best option is to play the two notes as a broken interval so that the second and fourth fingers can be lifted out of the way.

In another *ffff* passage on p. 4, line 2, the left hand pizzicato may be stronger if plucked with the second finger instead of the fourth. The following unusual intervals

occur harmonically and melodically: 7ths, 9ths P5ths and P4ths. The same advice regarding left hand preparations elsewhere in this document applies to the intonation work of this study. For example, in m. 25 find the high B-flat(6) by practicing the first finger shift from E-flat to B-flat; on p. 3, line 9 set the second and prepare the third for the double P5th (C-G-D). Most of Gidon Kremer's fingering suggestions are excellent, but on a few occasions he gives fingerings with a cramped (contracted) hand position which may not be comfortable for all players (ex. m. 32, downbeat, B-flat could be played with the second finger). In this same measure the high P5th, D6-A6, should be played more on the pad of the second finger (not the tip) in order to cover more of the strings.

Right hand difficulty: A wide variety of articulations, styles (flautando, m. 32), string crossings, dynamics and chords (mm. 18-35) are used. The string crossings result from disjunct melodic lines, and often occur with slurs. In some cases, they occur between two strings separated by an intermediary string (see example 25 below). Care should be taken not to touch the intermediary string with the bow (the D-string in the example). To facilitate this, lift the bow off the (G-) string, and perform the crossing with a very small movement of the fingers and hand (a variation of the afore-mentioned wrist crossing).



* Large string crossings with skipped string

Ex. 25. Large string crossings with intermediary, silent string, p. 3, line 2²⁶

Value: Henze's etude is excellent for its emphasis on intervals used in twentieth-century music. Dissonance and perfect consonance are exploited in the language of many composers and Henze gives 7ths, 9ths, P4ths and P5ths thorough melodic and harmonic treatment. This, of course, translates into an emphasis on ear training and intonation work for the etude. As with similar studies, use of a piano and/or tuner would be valuable to the violinist.

Musicality: The traditional elements of the phrasing are indicated by the composer's dynamic shaping, repetition and regular rhythms. This aspect of the phrasing is traditional in the sense that the lines are quite long, and, thus, dissimilar to Expressionist gestures and interrupted phrases. On the other hand, the disjunct melodic lines, the concentration on harmonic and melodic dissonance, and the emphasis on timbre are ideals from Expressionism.

²⁶ Henze *Étude philharmonique*, © 1979, 1981 Schott Musik International, © renewed. All Rights Reserved. Used by permission of European American Distributors LLC, sole US and Canadian agent for Schott Musik International.

Kim, Earl [Eul]

12 Caprices for Solo Violin (1980)

Composer Biography

Earl Kim (b Dinuba, CA, 6 Jan 1920; d Cambridge, MA, 19 Nov 1998), American composer of Korean descent, is primarily known for his vocal works—mostly song settings of Samuel Beckett, Rainer Maria Rilke, Stéphanie Mallarmé and Anne Sexton, among others. He began to study the piano at the age of nine with Homer Grun. He also studied composition and theory with Schoenberg at UCLA, and with Ernest Bloch at the University of California, Berkeley. Kim served in the US Army Intelligence Service during World War II and after the war returned to Berkeley, where he studied with Roger Sessions (MM 1952). He held teaching positions at Princeton (1952–67) and Harvard (1967–1990) Universities and remained active as a pianist and a conductor. His work has been championed by many performers, including Itzhak Perlman (who premiered 12 Caprices for Solo Violin in 1982).

Kim's pieces utilize a wide range of harmonic materials, yet the overall aesthetic is Eastern in its simple, uncluttered delicate nature. He uses tonal and atonal harmonic elements, and combines them with post-tonal stylistic procedures. Kim compared the formal and perceptual aspects of his music to the aesthetic of the Japanese stone garden. The garden “summed up my theory of composing: discrete images not taken in by the eye or ear at once, but seen or heard consecutively. At the end there is a whole that is somehow synthesized from all these separate pieces. Multiplicity becomes

unity...transitions take place by means of silences. Statements are being made when nothing is being said.”²³

Works with Violin

Concerto vln., orch.(1979); 12 Caprices solo vln.; Exercises en route (Beckett), Soprano, fl, ob, cl, vn, vc, perc, actors, dancers, film, 1963-70

General Remarks about the Collection

Although 12 Caprices for Solo Violin was composed in 1980, they are somewhat traditional when compared with many of the present collections. Stylistically, they do belong to the twentieth century, but the harmonic, melodic, and rhythmic language is often rooted in materials of the eighteenth and nineteenth centuries. Only Studies 1, 5, 6, and 9 utilize atonal and serial material, often with a fair amount of tertian harmonies and tonal procedures (such as sequences and brief harmonic progressions) mixed in. The rest of the studies are essentially post-tonal in style (except for No. 8), and contain a predominance of tertian harmonies and other traces of tonality. The studies are modern-sounding as a result of the juxtaposition, or static quality, of otherwise familiar tertian harmonies, an abundance of certain unusual intervals (M7ths, P5ths, P4ths, P1s, tritones, M9ths), occasional appearances of melodic synthetic collections (whole tone, octatonic, and half step, minor third), and through fragmented or continuous (static repetition) phrasing models. Mixed meter and some unusual rhythms are used (as with the ratio notation in Study No. 1), though, overall, the treatment of rhythm and meter is fairly traditional.

²³ Martin Brody, The New Grove Dictionary of Music and Musicians, ed. Stanley Sadie (London: Macmillan Publishers Limited, 2001), 13 : 593.

Because these studies are not aggressively dissonant or complex rhythmically and harmonically, they generally make a good introductory collection to twentieth century music. Newcomers to twentieth-century music will have plenty of familiar material and procedures to remain grounded, while they will be introduced to certain, general, modern features. In addition, the studies contain a substantial amount of challenges in violin-playing basics (double stops in thirds and octaves, etc.) which are useful to all stylistic periods and to developing good technique, in general.

Kim's etudes make use of a wide variety of techniques for the left and right hands and present certain challenges to the ear and mind. Challenges for the left hand include: large slow leaps (Nos. 1, 6), large fast leaps (Nos. 5, 9, 10, 11), expansion and contraction of the hand (Nos. 5 and 7), small finger movements (No. 7), preparations (No. 6), awkward chord settings (No. 8), melodic collections (whole tone, Nos. 2 and 5, octatonic, Nos. 3 and 5, half step, minor third, No. 10, chromatic, No. 3), intervals, harmonic and melodic (P1s, 2nds, 3rds, P4ths, tritones, P5ths, 6ths, 7ths, 8ves, M9ths). The treatment of the right hand is more traditional, and includes a variety of basic techniques more than the wealth of extended instrumental techniques found in other collections. Issues of the right hand are as follows: string crossings (slurs, Nos. 2, 6 and 8, wrist, Nos. 6, 7 and 9, double stops, No. 11), bow distribution (No. 9), single and double stop coordination (Nos. 10 and 12), and a variety of strokes and articulations. Other difficulties of the collection include coordination (Nos. 1, 2, 6, and 10), mental multi-tasking (No. 6), and ear training (atonal, 12-tone, and post-tonal). In most cases, a great deal of the phrasing and interpretation is left up to the performer. Since little is indicated, the player is free to choose whether to use the pieces as exercises or to add dynamics, colors, and other

aspects of musicality. The work is obviously performable, given that Itzhak Perlman gave the premier in December of 1982.

Composer	Kim, Earl.
Title	1
Style	Atonal
Level of difficulty	Intermediate
Left hand difficulty	Double stops; intervals (2nds, 3rds, tritones, P5ths, 6ths); large shifts
Right hand difficulty	String crossings with four strings (m. 10); wide variety of accents, articulations and dynamics
Other difficulties	Coordination (m.16); ear training
Value	Complex rhythmic work with ratio notation used by many composers in the latter part of the 20th century; ear training (atonal style, dissonance, disjunct lines)
Musicality	Short pauses and silence built into the phrase structure (ex. mm. 3, 5, 7, 15); gestures and events are fragmented and isolated.
Meter	Mixed; 3/4, 2/4, 1/4, 4/8
Tempo	Quarter = ca. 60 (largamente)
Rhythmic difficulty	Complex: ratio notation; triplets, quintuplets, 2 against 3

Style: The atonality in this study is, like Second Viennese School atonality, highly organized. The subsets and supersets are strongly interrelated in terms of their intervallic content. The important sets used are as follows: trichord [014] (m. 8, E-flat, E, G); [048] (m. 4, E-flat, G#, and B); [015] (m. 9, E, E-flat, B-natural); tetrachord [0148] (m. 1, E-flat, G, G#, and B); pentachord [01458] (m. 8, E-flat, E, G, A-flat, B); hexachord [014589] (mm. 10-12, C#, D, F, F#, A, A#). The unity of the intervallic content is such that trichords through hexachords contain much of the same interval classes and pitch classes. For example, the hexachord [014589] contains an astounding six imbricated [014] sets, represented by the numerals (0,1,4), (5,8,9), (5,4,1), (4,5,8), (8,9,0) and (1,0,9). (8, 9, 0) and (1, 0, 9) are difficult to spot because they are “wrap-around” sets using the pitch classes (A, A#, C#) and (D, C#, A#), respectively. [014589] also contains

five [015]’s represented by the numerals (0,1,5), (4,5,9), (9,8,4), (8,9,2), and (2,1,8) and two [048]’s represented by the numerals (0,4,8) and (1,5,9). [014589] additionally encompasses two [0148] tetrachords and the [01458] pentachord. The “MOTTO” at the very beginning is considered as part of the entire set of etudes, not only No. 1. The pitch classes form a dyadically partitioned 12-tone row, which, like the row of Berg’s Violin Concerto, has some interesting built-in tonal implications. The implied chords of mm. 1 and 6 (F and B major) are related by tritone, as are those of mm. 3 and 4 (D and A-flat major). The second chord could also be analyzed as a vii°7th “resolving” to the subsequent D major chord. The row (P₅) consists of the pitch classes F, A, B-flat, C#, D, F#, C, A-flat, G, E, D#, B. (To find out more about the construction of this row see Caprice No. 9.)

Left hand difficulty: Some of the responsibilities of the left hand can be simplified with effective fingerings. The most successful fingering in m. 12 involves shifting to fifth position with the second finger on C#6 just before setting the 3rd (A-C#). In m. 16, simplify coordination by playing F with the first finger and F# with the fourth. The D# in m. 13 must obviously be played with the fourth finger.

Rhythm and meter: The rhythm is difficult in several places. Mental work conducting and verbalizing without the instrument will be helpful in this case. In mm. 2 and 4 the quintuplet and septuplet (respectively) need to be spread evenly into one (quarter note) beat. For instance, the quintuplet in m. 2 can be verbalized “ta-ta-ta-ta-ta” or “1-2-3-4-5” with a slight emphasis on “4” for the change to E-flat. At the same time, the player should tap the beat with one hand or conduct a two-pattern. This combination of the vocal (intellectual) and the tapping/conducting (physical) secures the player’s

understanding of—and feeling for—the rhythm. The same process may be used to spread the quintuplet eighths across two beats in m. 6, but mm. 8 and 10 are more confusing. The ratio notation “7:6” instructs the player to squeeze seven notes (slightly faster) into the space of six regular eighth notes. Notice that mm. 8 and 10 are the same rhythm—the quintuplet in m. 8 looks different because the eighth notes are written to overlap with one another as double stops. As a first step, mentally remove the eighth rest at the beginning of the bar, and count the rhythm within a regular 3/4 bar. The triplet and quintuplet each take one pulse, as in mm. 11-12. Now set the metronome on eighth notes in 3/4 (with a high-pitched beep on the downbeat), and verbalize the rhythm as written. Be sure to verbalize the eighth notes slightly ahead of the pulses of the metronome so that everything fits in before the high-pitched downbeat. Strive to make the estimation even, rather than hurrying through the last beat of the bar to beat the metronome.

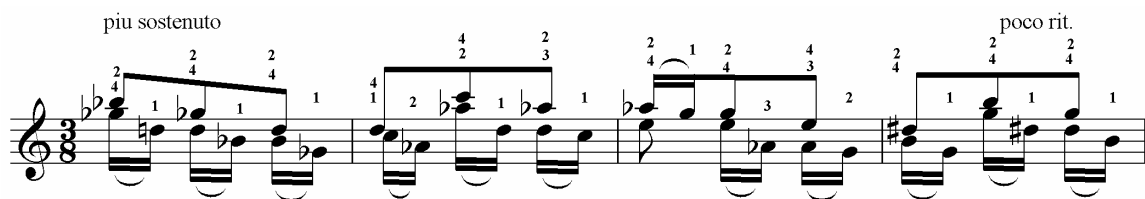
Composer	Kim, Earl.
Title	2
Style	Post-tonal
Level of difficulty	Intermediate
Left hand difficulty	Double stops (mostly 3rds and 6ths); small shifts; whole tone collection
Right hand difficulty	String crossings; the <i>détaché</i> should be articulated somewhat to insure good coordination and contrasted with connectedness of “ <i>più sostenuto</i> ”
Other difficulties	Coordination
Value	Changing harmonies; chromaticism; double stops; intonation with awkward unbalanced hand positions
Musicality	Large phrases left to performer, but should be played expressively (<i>con affetto</i>) with clearly contrasted characters between <i>détaché</i> , <i>più sostenuto</i> , and <i>più espr.</i>
Meter	Mixed; 6/8 and 3/8, ♩ = ♩
Tempo	♩ = ca. 84
Rhythmic difficulty	Simple

Style: The writing is certainly not diatonic, though tonal implications are present. It begins and ends tentatively in G-flat major. In m. 1, during the first grouping of six sixteenth notes, a V-I alternation can be perceived. On a larger scale, the harmony progresses from I-V on beats 1-3 and 4-6, respectively. This continues until m. 3, when a new pattern emerges. The first beat (using the ♩ as the unit of pulse) of m. 3 alternates between I and vii°7 in d minor (related to the key area of G-flat by tritone, as in the “MOTTO” which opens the work). The second beat is V-I in G flat, and this larger alternation between the d minor beat and the G-flat major beat continues through m. 4. In m. 5 the C whole tone collection is used, as is the C# whole tone collection in m. 7, until the harmony rests on A-flat major in m. 9. Measures 11-16 contain a long sequence, which descends chromatically, back to G-flat major in m. 17. The term “post-tonal” is used here to describe writing that is predominated by tertian harmony, without using conventional diatonic progressions. The style is somewhat reminiscent of Ysaÿe’s—the Belgian violinist/composer often uses traditional chords within non-traditional chord progressions, while also interjecting foreign elements such as whole-tone or pentatonic collections.

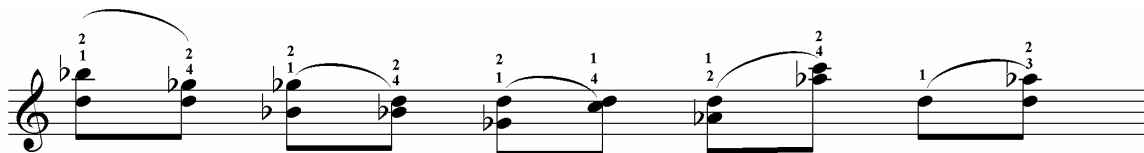
Left hand difficulty: The turning movement of the hand is used to alternate between certain double stops (as in the second half of mm. 1, 2, 9, 10); this movement is unavoidable here because of the speed and the back-and –forth alternation between the strings. The turning movement is the same one used by the violinist to play a scale in first position, and consists of a subtle turn of the hand and wrist while crossing from one string over to the next. In the context of this study, the movement must simply be

performed quickly and in alternation. The turn should be minimized, with the hand balanced precisely between the A- and E-strings.

Many small shifts must be measured and practiced from mm. 3-8. The whole tone collections from mm. 5-8 produce double stops that are awkward for the hand and the ear and should be practiced slowly for intonation. Refer to example 26 below for an illustration of the fingering. Listen to make sure that repeated pitches match after shifts, extensions, and the opening and closing of the hand (expansion and contraction). For example, D-natural is repeated several times using different fingers in mm. 5-6; the intonation should match after each shift and extension. The player must be careful not to lift the fingers off the strings and jump from one double stop to another. To avoid this, practice a slow, smooth shift between double stops. In m. 5, for instance, play the shift from the D to B-flat (6th) on beat one to the D to G-flat (diminished 4th) on beat two. Play each of these connecting shifts in legato with the bow and with a metronome to avoid taking any extra time. Example 26a shows how to practice mm. 5-6 (the first two measures of example 26) by connecting shifts between double stops in legato.



Ex. 26. Fingering—multiple shifts and extensions between double stops, mm. 5-8



Ex. 26a. Connecting double stop shifts in legato (recomposed in a practice version), mm. 5-6

Right hand difficulty: In mm. 11-14, string crossings across three strings create coordination difficulties; remember the simple rule “finger before the bow” (The finger must be placed *before* the bow arrives on the new string).

Musicality: Kim clearly shows the phrasing indications by the way notes are grouped. In mm. 1-2, the emphasis occurs on the single stops on the downbeat F and the D-flat marked with a tenuto on (large) beat two. Measure 3 changes to a duple accentuation, and each eighth of the bar should be stressed with weight in the bow and vibrato speed. The largest contrast occurs from mm. 11-14 (marked “*piu espr.*”). These measures should be played with much broader bow strokes to emphasize the new character and sweeping lines and the vibrato should be warmer at the beginning of the bar. In addition, a sense of fantasy or freedom can be evoked with rhythmic rubato by elongating the third sixteenth slightly and speeding up the thirty-seconds.

Composer	Kim, Earl.
Title	3
Style	Post-tonal
Level of difficulty	Advanced, especially if played in a brisk tempo
Left hand difficulty	Perfect unisons; extensions; chromatic patterns; octatonic collection
Right hand difficulty	
Other difficulties	
Value	Difficult unisons with leaps and lots of chromatics; expansion of the hand and sliding finger movements
Musicality	The interest comes simply from playing the accents, which emphasize the sense of metric instability
Meter	None
Tempo	Veloce (fast)
Rhythmic difficulty	Simple; motoric thirty second notes

Style: Tonal implications are fairly strong in this study; mm. 1-3 begin with the pitches F, C, and F, respectively, with strong emphasis on A-flat, as well. This implies an f minor tonality for the study, which is reinforced by the V-i alternation between mm. 6-

10 (without chordal fifths). These implications are challenged, as it were, by the unison-accented pitches after the downbeats in mm. 1-3. For example, in m. 1, the first three unison accents outline an *f* augmented triad (F, A, C[#]), rather than an *f* minor triad. Measure 4 also contains linear augmented triads (G, B, E-flat and E, G[#], C), and an octatonic collection on beats 4-6 (with an added G[#]). The “Largamente” is an obvious musical and rhythmic reference to the “MOTTO.”

Left hand difficulty: The P1s (perfect unisons) present the greatest challenge for intonation because the preceding chromatic runs create especially difficult stretches (extensions) on the unisons without much time for preparation. The B-natural unison in m. 2, for example, requires a fourth finger stretch, rather than the more desirable backward extension by the first finger. The change is necessary because the first finger is moving in a regular chromatic pattern (G, A, B) and it would not make sense to shift from G to A on the E-string, and then shift to fifth position on the A-string, while extending the first finger back. In short, both types of extensions must be utilized for the unisons in this study. The unison double stop is notated as an eighth note, but should probably be held only on the first thirty-second note as Itzhak Perlman’s fingering suggests. (Perlman commissioned and edited the work.)

The chromatic pattern (ascending and descending) also presents a challenge for clarity and rhythmic evenness. Both the old style way of sliding (1-1-2-2-3-4-0) and the modern Flesch fingering (1-2-1-2-3-4-0), *where the thumb and hand remain in one position*, must be used. Measure 2 is a good example of this—the first, fourth and fifth groups use the Flesch fingering, and the second and third use the old style of fingering. Measure 4 is a challenge, especially the octatonic scale, rising high up on the

E-string. The intonation of the augmented triads and the excessive repetition (7x) add to the difficulty.

Composer	Kim, Earl.
Title	4
Style	Post-tonal
Level of difficulty	Intermediate
Left hand difficulty	Double stops; chromatic line against held note; intervals: melodic major 7ths; difficult extensions and shifts in slurred passages (ex. m. 8)
Right hand difficulty	Sostenuto; sound quality in double stops
Other difficulties	
Value	Chromatics with pedal; (fingered) octaves; melodic 7ths
Musicality	Phrasing is left up almost entirely to performer; Kim does indicate “molto sostenuto”
Meter	3/2
Tempo	Quarter = 80 (Adagio molto sostenuto)
Rhythmic difficulty	Medium, odd-numbered groupings throughout

Style: Study No. 4 uses tertian harmonies (implications of chords) which are not related in a functional sense. Individual pitches are also emphasized through the process of framing. Melodically, chromaticism and large, dissonant intervals like M7ths dominate.

Left hand difficulty: Double stops in mm. 1-4 contain a chromatic line against a pedal tone. (This assumes that the player will hold through on the half notes—this is a legitimate issue because the half note cannot always be held.) For example, in m. 7, beat 2, and m. 8, beats 1 and 3, the half notes must be released almost immediately. If the other half notes are held, in study if not in performance, the player will have to manage the transition from the m6th to the P5th and back to the m6th. This will be achieved either by sliding the finger across perpendicularly to touch the lower string, or by using a small turning movement of the hand in order to push the third finger close enough to

Composer	Kim, Earl.
Title	5
Style	Post-tonal/atonal
Level of difficulty	Advanced
Left hand difficulty	Dissonant double stop leaps; octatonic passages; expansion from a central point; intervals (melodic P5ths); double stops (tritones, M9ths, 7ths, 2nds, P5ths, 6ths, 8ves)
Right hand difficulty	
Other difficulties	
Value	Whole tone and octatonic collections; large fast leaps; disjunct lines; dissonance; chromatic “expansion”
Musicality	Phrasing left mostly up to performer until shaping in mm. 28-31
Meter	Mostly 2/4
Tempo	Quarter = ca. 110 (Animato)
Rhythmic difficulty	Simple

Style: Study No. 5 contains a mixture of harmonic and melodic elements, some with tonal implications and some atonal. For example, mm. 1-4 contain a circle of fifths progression of tertian harmonies (m. 1, e minor; m. 3 a minor; m. 5, d minor; m. 7, g minor). The idea of the traditional descending 5ths sequential pattern is being borrowed from the tonal language and implanted at the outset of the study, rather than as a transition. Another descending 5th sequential pattern appears in m. 28 as a long chromatic passage. This pattern of ascending melodic 5ths within a larger descending fifths pattern continues to the end. The atonal elements consist of overt dissonances and octatonic collections. Measures 9-27, for instance, are all in C octatonic (C, C#, D#...) with ascending octatonic scales and thirty-second notes acting as rhythmic interjections. The two worlds seem to merge, or collide, in the final three bars. Here, the sequential fifth pattern cycles through eight different pitches (C, G, D, A, E, B, F#, C#) and finishes without a sense of pitch, or tonal center.

Left hand difficulty: Measures 9-27 contain octatonic collections and fast passages. Perlman's fingering once again indicates that the double stop eighth note (G in m. 9) is to be played as a thirty-second, and in m. 28 the indicated unisons are not to be played at all. This issue will have to be resolved by the performers and teachers, individually. If the work is to be performed, the edited fingerings may provide necessary simplifications; if studied, the added challenges may prove useful. Musicality and integrity to the composer's text, which usually supercede all other considerations, are not crucial in this instance. Since some unisons (ex. m. 29 on C4) are unplayable, it appears that they may actually be notated for phrasing emphasis, rather than double stop sonorities.

Double stops appear in particularly awkward combinations in this study, including M7ths to M6ths (m. 12), diminished 4ths to M2nds and diminished 3rds (m. 19), P8ve to m7ths (m. 24), M9ths to P8ves (m. 25). Large leaps, especially difficult jumping up an octave with double stops, elevate the virtuosity and technical challenge. This practice occurs with: 6ths in mm. 10, 15, 18, and 22; M7ths in mm. 12, 17, and 23; diminished 5ths in m. 13; diminished 4ths in m. 19; P8ves in mm. 24, 26, 27. In addition, these intervals contain sixteenth note alternations that produce other awkward intervals. Measure 15, for instance, contains alternations to P5ths, which must be played with the turning movement of the hand or, (perhaps more successfully) with the third finger (on D#) wedged in next to the second finger. In any event, the octave leaps should be practiced with slow, smooth shifts as simple double stops (without the added sixteenth notes) so that the distance can be measured and remembered by the left arm. Later, the

slide can easily be removed by performing the same left hand movement while the bow is stopped.

In general, the double stop work in this piece is dangerous because of the duple groupings of slurred notes, which tempt the player to “jump” (lift the fingers off the strings) from one double stop to another after each duple group. This kind of technical approach will cause many intonation problems for the player. This habit is easily changed if the player practices the shift between each group—audibly at first, then silently. For example, in m. 9, beats 1-2, practice by moving the first finger from G4 on beat 1 perpendicularly across to A-natural on the E-string (not printed) and playing the shift down to G in second position. This method of finding one note on the descending shifts and dropping the other finger afterwards is advisable as a preliminary practice, and may be changed to a double stop shift later. From mm. 9-10, the hand remains in third position, but still the jump must be avoided. Instead, move the second finger across and up a 1/2 step (from B-flat to A) and drop the first finger, or move the first finger across and up a 1/2 step (from A to C#) and drop the second. Likewise, the hand should be moved to the D string at the end of m. 10 to practice the shift down to third position while simultaneously preparing the third finger for the P5th on D#. Notice, also that the bottom voice in mm. 9 and 10 contain the same C#-D# alternation and how easily the D# may be played out of tune because of the completely different feeling in the hand with the tritone (m. 9) and the 6th (m. 10).

The technique of hand expansion is utilized in m. 28. E is the central point and the intervals expand outward above and below E in a stepwise chromatic fashion. This creates difficult changing and extensions, followed by wrist crossings between two

strings. Be sure to prepare the extensions one note ahead while not altering the held note.

To be more specific, play the third note of m. 28 (E-flat) with the second finger while extending the third finger and holding it directly above the F#, and so on.

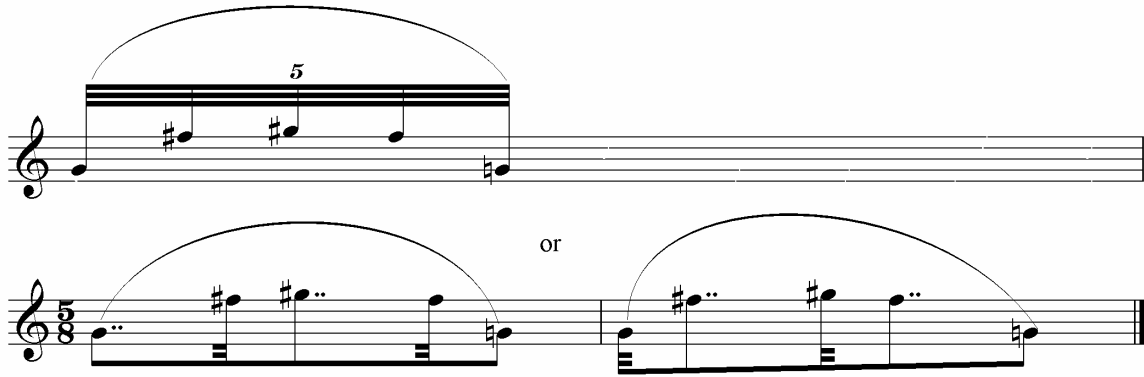
Composer	Kim, Earl.
Title	6
Style	Free atonal
Level of difficulty	Intermediate
Left hand difficulty	Preparation; large leaps; intervals (major 7ths)
Right hand difficulty	Sound; timbre; string crossings
Other difficulties	Coordination; mental, switching between arco, pizz and harmonics; choreography of the hands
Value	Coordination work with wrist crossings; 20th-century effects, gestures and sound; intervals (9ths, 7ths, 2nds)
Musicality	Mechanical character
Meter	3/4 (m. 16 contains an extra ♯ which is probably a mistake)
Tempo	Quarter = ca. 60
Rhythmic difficulty	Simple

Style: Pitches are organized into sets, but the connection between sets does not form a web construct as with Second Viennese composers. Organicism in the sense of an entire family of sets growing forth from one or a few small sets, like [013] or [014] does not exist here. The pitches are simply organized into contrasting sets that inhabit various sound palates. Measures 1-12 use the set [01257]; mm. 1-5 use the pitch classes F#, G, G#, B, and C# to form this set and mm. 6-12 use the pitch classes E-flat, F, A-flat, A, and B-flat. Measures 13-16 use the [02468] and [02468a] sets, whole tone pitch collections which provide a contrasting sound palate to the [01257] family. Finally, mm. 17-24 contain another contrasting palindromic set [013578] which also happens to form an F major collection, reminiscent of the opening “MOTTO” in sound and texture. The pitches are arranged in 3rds and sound like implied (incomplete) chords in the centrality of F major, forming a local I-IV-I-V progression in that key area. Besides these local tertian

sonorities, the F major centricity is also part of a larger motion by 3rds. This begins with a long B-flat major chord in mm. 6-7, which continues the D major chord of mm. 13-14 and concludes with the F major of mm. 17-18.

Other difficulties: Coordination is one of the main technical challenges in this study. The thirty-second note quintuplet figures must sound clear and even, and this depends on the timing of finger placements and string crossings. The bow speed will be increased in the middle to produce the dynamic swell, but the string crossing motion should be performed with the wrist. This point cannot be overemphasized: the wrist crossing should *not* be minimized as string crossings usually are, but instead should be negotiated with more vertical motion and less horizontal motion so that each string is touched independently without blending into temporary double stops. Only then can real clarity be achieved.

The left hand fingers should be placed in advance as much as possible. Therefore, the following should be observed: the first and third fingers will be set in mm. 1-4; the first, second and fourth fingers will be set in mm. 9 and 11; and the first, third, and fourth fingers will be set in mm. 8 and 10. Many possible accidents can be avoided this way. Still, the timing of the string crossings and the placement of other fingers must be carefully practiced. One method, which has not been hitherto discussed, is often referred to as “practicing in rhythms.” New rhythms, especially dotted ones, should be invented using the notes of the quintuplet. Set the metronome at quarter = 100 bpm and play the notes as shown in example 29 below. Remember to set as many fingers as possible, and do not increase the tempo until each rhythm can be played perfectly evenly and with a physical sense of the string crossing motion in the wrist.



Ex. 29. Rhythmic variations for practicing coordination on quintuplets, from m. 2

Musicality: Repetition here conveys the assembly line style of cyclical exchange of material in the etude. Observe this process in mm. 1-5: the 2nd, 4th and 6th eighth notes of each bar (the “and” of each beat) remain constant, except that the quintuplet changes the position and register of the three pitches. However, the 1st, 3rd and 5th eighth notes of each bar change in an orderly fashion. Measure 1, eighth 1 moves to m. 2, eighth 3; m. 1, eighth 3 moves to measure 2, eighth 5. Measure 2, eighth 5, moves to measure 3, eighth 1, and so on. Thus, the mechanical nature of the music is reflected by the intentionally repetitive character and by the choreography of the violinist, who plays a kind of toy soldier, switching between arco, pizzicato and harmonics across humorously disjunct lines.

The atonal sets of pitches emphasize melodic dissonance in the etude and create an unusual sound palate for the ear. The violinist should play these collections of pitches condensed within an octave, both on the violin and on the piano. The collections could also be extended like scales to two or three octaves. For example, take the set [01257] with the pitch classes G, A-flat, A-natural, C, D, (and repeating in the next octave G, A-flat, etc.) starting on the G-string and ascending. Fingerings may be difficult to establish, but the ear and the hand will benefit from the work. Such practice will establish an

immediate aural connection between like sets, which have the same intervallic content with different pitch classes. This game of creating new scales can and should be applied to much of twentieth-century literature. Practice time will be more interesting and more efficient since the ear and the left hand will be stable. The learning curve will also be increased, allowing the player to learn a composition, and all successive compositions of a similar nature, with greater ease and enjoyment.

Composer	Kim, Earl
Title	7.
Style	Post-tonal
Level of difficulty	Intermediate
Left hand difficulty	Double stop intervals (diminishing and expanding): M9ths, P8ves, 7ths, m6ths, P5ths P4ths, tritones, 3rds, M2nds, P1s; connections between intervals with small finger mvts.
Right hand difficulty	Clarity and sound quality in double stops, very legato; also smooth connections during string crossings (the opposite of the wrist crossings discussed in the previous etude)
Other difficulties	
Value	Mixed meter, right hand clarity, and sound quality in the string crossings; change between single and double stops; left hand diminishing and expanding intervals with small mvts.
Musicality	Refrain-and develop-style phrasing; tranquil, quiet character
Meter	Mixed; sixteenth note remains constant
Tempo	Dotted eighth = 40 (Teneramente)
Rhythmic difficulty	Medium; metric complexity and cross rhythms

Style: The post-tonal elements are the tertian harmonies and the hint of key area centricity on F major and d minor. Measures 9-12 illustrate this. The scale in the lower voice starting on the pick-up to m. 10 is an F major scale (starting on G). The F major harmony at the end of m. 10 is followed by a C major chord in M. 11 (the dominant in F). The C major chord quickly departs to a g minor chord, which sets up the shift of centricity to the relative minor, d minor, in m. 12. “Centricity” is used to avoid confusion in this case, since the piece is not tonal but does contain remnants of chords and chord

functionality. Kim uses only the F major and d minor collections, though other harmonies are underscored locally at various points. The binary structure of the study is given below in example 30.

A	A'
mm. 1-12	mm. 13-28 (25-28, coda)

Ex. 30. Form chart

Left hand difficulty: The challenge arises from the intervallic expansion. In fact, this piece provides a fairly systematic approach to this technical issue. In m. 1 the refrain is stated, and on beats 2-3 the intervals diminish in the following sequence: m7th, m6th, P5th, P4th, m3rd, M2nd. The connection between m6th, P5th, and P4th is the most problematic and the most useful for improving left hand technique in this study. Practice the P5ths with the fingering given in the edition, playing the fifth with the second finger. This will require a small turn of the hand or push across from the A- to the D string. As an alternative, also try sliding to the P5th with the first finger. The former fingering is more satisfying musically, while the latter is easier for intonation, though it contains an undesirable slide with the first finger. Advance placement of the left fingers should also be practiced. For example, while playing open A on the downbeat of m. 10 set (advance place) the fourth finger on C and prepare the extension of the first finger back to B-flat. Naturally, the stretch will have to be made without moving the fourth finger, or else the C will sound too low when played. Practice this technique in a slow tempo with a metronome to ensure that no extra time is added for the placements and extensions. Slow shifts should be played on the new bow to connect the double stops. Thus, in m.10 the fingered octave C-naturals are held on an up-bow (for the sake of discussion), and the

slide with the second and third fingers to the (D, B-flat) 6th begins to take place as soon as the down-bow begins.

Right hand difficulty: String crossings should be thought of in exactly the opposite way from those of the previous study. Here, smoothness is the ideal, and, therefore, the crossings must be as rounded as possible. The blend, which was to be avoided in Study No. 6, is now sought after. In m. 9, during the B-flat on beat 2, for instance, the arm should move gradually closer to the E-string, so that weight can be added on the change of bow to grab (catch with articulation) both strings. This type of preparation and early movement will allow sounds to be connected smoothly.

Composer	Kim, Earl.
Title	8.
Style	Poly-stylistic/Neo-Classical
Level of difficulty	Intermediate
Left hand difficulty	Double stops: parallel 3rds in C major; melodic M7ths and [014] sets with awkward finger settings
Right hand difficulty	Bow distribution; strokes: spiccato and/or up-bow staccato
Other difficulties	
Value	Parallel 3rds with connections and preparations for [014]’s
Musicality	Phrasing is left mostly to performer; minimalistic in consistency
Meter	6/8, mostly
Tempo	Dotted quarter =60 (Risoluto)
Rhythmic difficulty	Simple

Style: Parallel 3rds in C major are repeated throughout Study No. 8. The monotony and insistence of this collection at this interval is only broken on certain strong beats by a group of three notes which always form [014] trichords. These three-groups consist of two grace notes connected to a sixteenth note and notated “as fast as possible.” The accented [014]’s interrupt and intrude upon the pleasing sound of the C major collection, thus setting up a dichotomy between the tonal and the atonal. Ironically, the [014] set contains both a major and a minor third, which would seem to suggest

compatibility with its tonal counterpart. However, the emphasis with the [014] sets is on interval class 1, expressed by the interval of a M7th. The style is listed in the above form as “Poly-stylistic/Neo-Classical” because the [014] intrusions can be seen as a neo-Classic mocking of tonality (especially with the repeated C major homophony), or as a poly-stylistic contrast between (ironic) tonality and (realistic) atonality. Notice also that m. 3 of the study (part of a three bar introduction) contains double stops in the d minor collection with intervals diminishing from m6th, P5th, P4th, m3rd, M2nd. An octatonic collection is formed by these notes, but more importantly, Kim has created an effective transition between Studies 7 and 8.

Left hand difficulty: Parallel 3rds in C major do not need to be discussed separately here, since the technique is covered in countless pre-twentieth century etudes. A few details about preparation and fingering are, nevertheless, appropriate for this piece. Fingerings for [014]s must be chosen carefully in mm. 4-15 because the note preceding the high E(6)-G(6) third should be played with a third or first finger if possible, in order to simplify the ascending shift. (The high E-G third will always be played with fourth and second fingers, respectively.) For example, in m. 4, the [014] set at the beginning of the bar could be played with the fingering (3-1-4) on F, D and C#, but the shift may necessitate playing (3-1-3) instead. The [014] sets are difficult for coordination because the fingers will tend to arrive late on these fast groups. Therefore, set fingers in advance whenever possible. For example, in m. 6 the F# and B-flat should be placed in advance, so that only the third finger must be dropped on time for the A. In some cases, various fingers may be held down from the preceding thirds. In m. 25, the D on the downbeat should be held down from the thirds at the end of m. 24, and in m. 26, the E on the

downbeat is held with the fourth finger from the end of m. 25. The [014] sets themselves are awkward in terms of the setting of the hand, and should be practiced carefully for intonation. Pay particular attention to the feeling in the hand when playing M7ths with a cramped fourth finger or a stretched third finger position. Also, be sure to prepare the placement of the other finger (second or third) by moving it (in the air) directly over the place where it will be dropped.

Right hand difficulty: The right hand difficulty lies in the distribution of the bow. The grace note sets [014] with accents will require more bow than the subsequent staccato 3rds. Several solutions seem possible. One possibility would be to start at the frog on the [014]'s and make the accent without expending too much bow; then the staccato notes could be played off the string, in the lower-middle of the bow. Another possibility would be to play in the upper half while playing all of the staccato 3rds on a single bow (up-bow staccato).

Composer	Kim, Earl.
Title	9.
Style	Poly-stylistic/12-tone
Level of difficulty	Intermediate
Left hand difficulty	Large shifts; intervals: 8ves, high P5ths
Right hand difficulty	String crossings with the wrist (see Study No. 6 for more about this technique)
Other difficulties	Ear training: twelve-tone
Value	12-tone style; octaves crossing strings; chromatic sequences with high P5ths; awkward chord settings; large shifts
Musicality	Unlike other studies in this collection No. 9 is made up of three somewhat distinct exercises; musicality is largely left to the discretion of the performer
Meter	3/8 (for Section 1), 3/4 (Section 2), 6/8 (Section 3)
Tempo	♩ = ca. 69 (Maestoso, mm. 1-20), ♩ = ca. 144 (Leggiero)
Rhythmic difficulty	Simple

Style: Study No. 9 is unusual in this collection for not being stylistically consistent unto itself. Measures 1-8 are in a twelve-tone style, while mm. 9-20 and 21-36 are post-tonal. Measures 1-8 are comprised of four twelve-tone rows (two measures each). The rows are constructed in a Weberian style—that is, dyadically and hexachordally. The first row (P₄), in mm. 1-2, is as follows: E, G#, A, C, C#, F, B, G, G-flat, E, D and B-flat. The dyadic construction is [04] [03] [04], [04] [03] [04], which combines into two [014589] hexachords. The row has a Bartókian symmetry on many levels. The row itself is palindromic—so the intervals read the same from left to right (P form) as from right to left (R form). The [014589] hexachords are similarly palindromic and the two hexachords are separated by a tritone [06] (F in m. 1, to B in m. 2). This creates a vertical axis of symmetry on G# between the two hexachords. The same row (P₅ in that case) also appears in the opening “MOTTO” of the work.

The second and fourth rows, in mm. 3-4 and 7-8, are more problematic because they do not belong to the same matrix as rows 1 and 3, in mm. 1-2 and 5-6. Rows 2 and 4 are also dyadically constructed, with the same [014589] hexachords (making them combinatorial with the first set of rows) and the same interval class content. However, the order of the pitches has been changed. Rows 2 and 4 also do not match each other exactly because of what appears to be an error in m. 3—the second dyad (A-C) should be reversed to (C-A). This way, the interval between the second and third notes would be a descending P5th in row 2 (F-C, not F-A) and row 4 (B-E). Along this line of thinking, the order of the first dyad in rows 2 and 4 should also be changed, for this would maintain the inverse pattern established in row 1. Observe in m. 1 how dyad 1 (E-G#) goes down,

dyad 2 (A-C) goes up, dyad 3 (C#-F) goes down, and so on. Anyway, the rows are highly organized and are therefore Webernian in their construction.

Measures 9-20 are post-tonal because they use traditional nineteenth-century tertian harmonies and sequential procedures, though no particular tonality is established (aside from a brief arrival on g minor in m. 21). The sequence is a descending chromatic one, with four three-bar legs. Each leg goes from a local tonic to dominant through a voice-leading harmony. The sequence descends chromatically from b-flat minor (m. 9) to a minor (m. 12) to g# minor (m. 15) to g minor (m. 18), where it remains through m. 21. Another sequence, descending stepwise, begins on the fourth eighth note of m. 21. A cycle of 5ths begins here, with E-flat major (m. 21), continuing with A-flat major on the second half of m. 22, and then D-flat major (leg 2 of the sequence) on the second half of m. 23, and so on. The sequence breaks off in m. 27 and the A major harmony is skipped in order to arrive suddenly on G major in m. 28, where the harmony remains until the end.

Left hand difficulty: Awkward broken chord settings in mm. 9-20 contain high P5ths, which are challenging for intonation and clear sound. P5ths in this register may require a small technical adjustment in the left hand (unless you happen to have fingertips as wide as those of Itzhak Perlman). Some teachers describe this adjustment as “laying back on the pads” or “playing with the fleshy part of the fingertip” (as opposed to the tip closer to the nail). Whatever language is used, the technique involves slightly lowering the hand to the fingerboard and back towards the scroll so that a larger surface area of the finger may be used to cover a larger portion of the two strings. In certain measures without P5ths, an alternative fingering may be used. For example, in m. 11 F6 may be

played with the fourth finger and F5 with the third. Then in m. 12 E6 would be played with the third finger and E5 with the second as printed. Many players will find this preferable, since the shift will not have to be performed on one finger across two strings. The same procedure can be used in mm. 14-15, 17-18, and 20.

Measures 21-36 contain a variety of traditional problems relating to intonation and coordination. Large ascending and descending shifts must be mastered to cope with the large melodic leaps in a quick tempo. Many possibilities for fingerings exist besides the printed ones should the player wish to avoid some of the descending slides or stay in position to avoid certain leaps. (Descending slides, or slight glissandi, are to be avoided whenever possible, as they are considered in poor taste and as an old-fashioned stylistic convention.) For instance, mm. 25 and 27 contain (unavoidable) large leaps, which will be less noticeable if the leap occurs on the preceding figure on the A-string. In m. 27, the first three eighths of the measure can be played in position, thus requiring only a small shift on the A-string from A to C#. Coordination should be observed in the descending arpeggios, since the bow will have a tendency to arrive on the new string simultaneously with the placement of the finger. Remember that, for clarity and precision, the finger must be set *before* the bow arrives.

Composer	Kim, Earl.
Title	10.
Style	Post-tonal
Level of difficulty	Intermediate
Left hand difficulty	Intervals: 3rds in C major, melodic P4ths with large leaps, half step minor 3rd scales (with shifts and extensions)
Right hand difficulty	Double stops to single notes: catch 2 strings, then release the top string.
Other difficulties	
Value	Intervals: half step minor 3rd scales
Musicality	An exercise which leaves phrasing up to the performer; “Cascando” (cascades) of descending 3rds and rising scales
Meter	6/8
Tempo	Dotted quarter = 84
Rhythmic difficulty	Simple

Style: The pitch material is based on two contrasting ideas, written on alternating measures throughout the study. The first idea is a descending sequential pattern of 3rds using the C major collection. The second is a synthetic half-step, minor third scale—B, C, E-flat, E, G, G#, B...²⁴ Incidentally, this collection could also be described as an [014589] hexachord, which connects this etude to the previous one compositionally and aurally. The B-C semitone also hints at tonicization of C major because the half step, minor third scale is surrounded by C major material. The idea of the 3rd is important on several levels. Individual double stops in thirds descend sequentially by third, and each odd-numbered measure descends by third sequentially from the previous one, except m. 9, which restarts the pattern.

Left hand difficulty: Descending 3rds in C major create a constricted hand position when they appear in a high register with melodic P4ths. Half step, minor third scales are slightly awkward for shifts and extensions. The same advice from Kim’s Study No. 6 about inventing new scales is certainly applicable here. Start on any pitch, ascend

²⁴ Aldwell and Schachter, 450.

by a 1/2 step, ascend by m3rd, and so on, continuing the pattern up to three octaves. E-flat is already given in the piece, but starting on C would begin C, D-flat, E, F, G#, A, C, D-flat, etc. The player must carefully weigh the issue of tempered versus “expressive” intonation when playing symmetrical synthetic scales. Playing 1/2 steps expressively close creates the impression of tonality or pitch center because the first note of each 1/2 step pair is made to serve the second. In an atonal setting, this practice may be misleading and undesirable.

Composer	Kim, Earl.
Title	11.
Style	Post-tonal
Level of difficulty	Intermediate
Left hand difficulty	Double stop 3rds with large asc. and desc. Leaps
Right hand difficulty	Double stops in legato with string crossings
Other difficulties	
Value	Very good benefit for practicing large (arm) shifts and smooth movements on 3rds
Musicality	Marked “Appassionato,” the playing should be serene and smooth, with warm vibrato and expressive sound; use (right) arm weight to emphasize tenuti
Meter	3/4
Tempo	Quarter = ca. 54 (Appassionato)
Rhythmic difficulty	Simple

Style: This brief ten-bar etude has a minimalist quality due to the repetition of certain gestures, static harmony, and a steady, motoric eighth rhythm. The harmony alternates between E major and A major chords; however, the absence of dissonance and longer, more varied progressions negates the sense of key. Thus, the study is not tonal, but rather post-tonal.

Left hand difficulty: Practice slow, smooth arm shifts on thirds, ascending and descending. The preparation for each shift should involve moving the fingers across to the “new” strings. For instance, in m. 1, beat 3 (and like places), move the hand across to

the D string and practice the descending shift with the first finger (from C# in sixth position to E in first position). Next, lighten the shift and add the third finger. (Some finger pressure may be necessary to produce a focused sound on the final chord of the etude.)

Right hand difficulty: Try to stay on two strings as much as possible during the chords; the bow will stay briefly on the middle string alone (bow on 2 + 1 + 2 strings).

Composer	Kim, Earl.
Title	12.
Style	Post-tonal
Level of difficulty	Intermediate
Left hand difficulty	Double stops in P5ths (harmonic and melodic), 3rds, 6ths; shifts; extensions; (m. 16, last two chords play 2/3-4/3 fingering)
Right hand difficulty	Coordination; combination of playing on 2 strings and 1 string
Other difficulties	
Value	Excellent study of violin playing basics; preparation in both hands; coordination work; right hand work
Musicality	
Meter	3/4, 2/4
Tempo	L'istesso tempo semplice; ♩ = ca. 72 (mm. 9-16)
Rhythmic difficulty	Simple

Style: This study is the closest to true tonality of the twelve in the collection. Measures 1-8 alternate between e minor and D major chords, and evoke a sense of G major tonality and D modality. Measures 9-16 alternate between E major and A major chords and thus establish a fairly unambiguous A major. However, this etude also has the same static minimalist quality as Number 11, and this, combined with the eventual ending at the m. 8 “*fine*” on D modal leads to the classification of “post-tonal.” The structure is a clear A B A ternary form.

Right hand difficulty: In mm.1-8 (except mm. 2 and 6) the double stops on the downbeats should be produced by keeping the bow close to the E-string and adding arm

weight to “grab” the (E) string (A-string in m. 8). Using an elbow movement will produce a sloppy articulation, not on two strings simultaneously, but first on one string then on the two strings together.

Other difficulties: Coordination must be practiced to avoid accidents. In m. 1, beat 1, for instance, the first (or second) finger must be dropped very slightly before the bow adds weight to catch the two strings. In other cases (like m. 2) fingers may be placed in advance.

Cage, John

Freeman Etudes, Books 1 and 2 (1980), Books 3 and 4 (1990)

Composer Biography

John Cage (b. Los Angeles, 1912; d. New York, 1992) is acknowledged as one of the most influential composers and musical philosophers of the twentieth century. Much has been written about his life and work, thus what is presented here is intended as a very brief and general background. Cage began composition studies with Richard Buhling in Los Angeles in 1931. He followed this with study of non-Western, folk and contemporary music, with Henry Cowell at the New School for Social Research. Cage was working on chromatic counterpoint while studying with Adolf Weiss in New York and Weiss decided to introduce Cage to Schoenberg. Cage followed Schoenberg to Los Angeles in 1934 “and was awestruck by the elder composer and his fierce devotion to music. Cage vowed to devote his life to composition as a result of his encounters with Schoenberg.”²⁵ Cage composed with Schoenberg’s serial method for a while, but eventually returned to his roots, giving up Schoenberg’s serialism and scientific rigor for Cowell-like American experimentalism. He became the leader of a group of avant-garde composers known as the New York School. His musical aesthetics are most concerned with rhythmic duration and timbre. Cage is best known for his invention of the prepared piano (Sonatas and Interludes) and for his creation of a new style of composition, using the aleatory principle (i.e., chance music and indeterminacy).

In his article, “Statistic and Psychological Problems of Sound,” Werner Meyer-Eppler states, “A process is said to be aleatoric if its course is determined in general but

²⁵ James Pritchett and Laura Kuhn, The New Grove Dictionary of Music and Musicians, ed. Stanley Sadie (London: Macmillan Publishers Limited, 2001), 4 : 796.

depends on chance in detail.”²⁶ Bryan R. Simms’ book Music of the Twentieth Century: Style and Structure also makes a distinction between “indeterminacy of composition” and “indeterminacy of performance.”²⁷ The latter refers to the procedure of throwing dice (the Latin word for dice is “alea”), tossing coins, or using the I Ching (Chinese Book of Changes) like John Cage to determine elements *during the compositional process*. The former refers to the use of graphic notation like that found in Cage’s “Concert for Piano and Orchestra” and Earle Brown’s “December 1956” and other means to determine certain elements beforehand while leaving much of the specific outcome up to the performers. Author Eric Salzman writes, “It is important not to confuse this music with improvisation; there is no question here of performance tradition or spontaneous invention within some given pattern but only controlled-choice situations in which any rational basis for decision has been intentionally removed or minimized.”²⁸ However, this process is part of the tradition of improvisation. Salzman makes a clear distinction between improvisation and “controlled-choice situations,” but most improvisations (including those in jazz) could be described in precisely that way. In both of these styles, performers are asked to invent unknown elements within the parameters of the known elements. In jazz, for example, the performers invent specific rhythms, pitches and dialogues within a preset harmonic, metric and formal structure. Pieces using “indeterminacy of performance” give the performers some elements while withholding others. The performer may be given: specific pitches and asked to invent the rhythm (or vice-versa); a set of events and asked to invent the sequence (and therefore the form) and the flow of time; or a graph (as in the above-mentioned “December 1956” by Brown)

²⁶ Werner Meyer-Eppeler, “Statistic and Psychological Problems of Sound,” *Die Reihe*, 1 (1958).

²⁷ Simms, 357.

²⁸ Salzman, 161.

which contains only vague indications about the isolated, disconnected musical events and their structure. Only the last of these is unlike improvisation, and all of them give greater artistic license to the performer(s). In fact, Cage turned to graphic notation in order to insure that performers would become collaborators in the creative process. Any of these roles is preferable, he concluded, to the conventional duty of performers, who, “like laborers, do simply as they are told.”²⁹

Much of Cage’s musical aesthetics are derived from his admiration of Eastern culture and thought, particularly Zen philosophy.³⁰ As a composer, Cage was allowed, with aleatoric methods, to give up control and—along with it—taste, ego, experience, and will. He states:

Where it is realized that sounds occur whether intended or not, one turns in the direction of those he does not intend. This turning is psychological and seems at first to be a giving up of everything that belongs to humanity—for a musician, the giving up of music. This psychological turning leads to the world of nature, where, gradually or suddenly, one sees that humanity and nature, not separate, are in this world together; that nothing was lost when everything was given away. In fact, everything is gained. In musical terms, any sounds may occur in any combination and in any continuity.³¹

This last sentence is important, for it reveals the end result of the aleatoric methods in Cage’s music. The quote also gives some insight into Cage’s appreciation for sounds- not sounds relating to other sounds, but sounds for their own sake, and also for the negative space between the sounds—silence. In fact, Cage places as much artistic value on the sounds that are in and around us as those which are predetermined in a performance.

For in this new music nothing takes place but sounds: those that are notated and those that are not. Those that are not notated appear in the

²⁹ Simms, 363.

³⁰ Simms, 360.

³¹ John Cage, Silence, (Cambridge, MA: MIT Press, 1967), 8.

written music as silences, opening the doors of the music to the sounds that happen to be in the environment. This openness exists in the fields of modern sculpture and architecture... while looking at the constructions in wire of the sculptor Richard Lippold, it is inevitable that one will see other things, and people too, if they happen to be there at the same time, through the network of wires. There is no such thing as an empty space or an empty time. There is always something to see, something to hear. In fact, try as we may to make a silence, we cannot.³²

Works with Violin

Nocturne, vn, pf, 1947; String Quartet in 4 parts, 1949-50; 6 melodies, vn, kbd, 1950; 16 Dances, fl, tpt, 4 perc, vn, vc, pf, 1950-51; 26'1.1499" for a String Player, 1953-55; Cheap Imitation, vn version, 1977 [choreog. Cunningham as Second Hand]; Apartment House 1776, mixed-media event, 1976 (arr. vn, pf, 1986); Chorals, vn, 1978; 30 pieces, str. qt, 1983; Eight Whiskus (C. Mann) 1 v, 1984, version for vn, 1985; Seven, fl, cl, vn, va, vc, perc, pf, 1988; Four, str qt, 1989; Two⁴, vn, pf/shō, 1991; Five³, trbn, str qt, 1991; Twenty-six, 26 vn, 1991; One¹⁰, vn, 1992; Two⁶, vn, pf, 1992

General Remarks about the Collection

Freeman Etudes by John Cage is the only collection of studies presented in this monograph that consists of aleatoric music of the type that Simms described as using "indeterminacy of composition." All of the other studies in this monograph using aleatoric methods are of the type using "indeterminacy of performance." Thus, all chance operations have been carried out prior to performance in order to determine specific pitches, rhythms, dynamics, timbres, etc. Unlike some of Cage's other works, this one leaves very little up to the performer, save reproduction of the notations in the score. The work consists of thirty-two etudes divided into four books with eight etudes each. The work is published in two volumes: Books 1 and 2 (Etudes 1-16) (1980) and Books 3 and

³² Cage, 7-8.

4 (Etudes 17-32) (1990). The etudes were composed for the violinist Paul Zukofsky, and have since been championed by the performances and recording (supervised by the composer) of violinist Irvine Arditti.³³

Like most of Cage's music, Freeman Etudes is concerned with duration and timbre, above all else. Violinists wishing to learn these pieces should make timing and sound their primary focus. Most will be tempted to devote the majority of their practice time to the most obvious challenge—intonation (or, less ambitiously, playing the correct pitches). This issue will certainly have to be addressed in one's preparation, but not at the expense (hopefully) of taking care to produce an excellent ponticello timbre or a well-timed rhythmic event. Remember, the exact pitches were chosen, like the rest of the elements, through chance operations, and are, therefore, no more important than any other aspect of this music. In addition, these studies were not designed as a systematic method for improving a violinist's intonation, and to use them in this way would be unwise.

Left hand difficulty: Other areas of this monograph discuss the issue of unprepared entrances on high notes. Always pay close attention to the departure and arrival points of the first finger (even when another finger is performing the actual shift). The shifting finger should rest lightly on the string while sliding very smoothly until adding a bit more pressure near the point of arrival. The shift should be performed within the confines of a specific pulse, not "for as long as it takes to get there." In order to be smooth in a performance (in a specific tempo) the shift must be always be practiced in a tempo (even if a very slow one, at first). Also, keep in mind how the notes relate to one

³³ James Pritchett, "John Cage: Freeman Etudes," (accessed on 27 April, 2004), <http://www.music.princeton.edu>. For more information about Cage's compositional process, and the performance difficulties of the Freeman Etudes, refer to the writings of Cage-scholar James Pritchett.

another across the strings. Specific strings are indicated for each note in the score (except for certain low notes on the G-string that cannot be played anywhere else) and this must be followed precisely by the performer, as it relates to timbre, which is of central importance in this music. Shifts may be avoided by using extension fingerings, and, in this way, execution will be significantly simplified.

Rhythm: Rhythm is notated in seconds in these studies. Two horizontal tracks appear below each staff. The lower of these represents time in seconds (where each vertical notch in the line equals one second); the upper line shows the location of each musical event as it relates to time in seconds. The performer is expected to approximate, as closely as possible, these musical events as they relate to seconds of duration. In some cases, nothing but silence will occur in the space of a second (as in Etude I, seconds 29-30), while another second may contain multiple events (Etude I, seconds 15-16, for instance, contain eight events). The easiest way to keep track of time is not to place a clock next to the music, but rather to set a metronome to 60. Sixty refers to 60 beats per minute, or in other words, one beat per second, so each beat will represent one notch on the (lower) time track in the score.

Musicality: The etudes, like many works from New York School composers, present certain uncertainty with regard to expression and phrasing. Cage and his followers, Martin Feldman, Earle Brown, and Christian Wolff, tend to write using isolated musical events, where sounds are deliberately disconnected. Thus, the musicality should be approached in a Zen-like manner where sounds and timbres are appreciated for their own sake. The traditional concept of phrasing—as an attempt to create expressive

gestures and long lines by giving direction or sostenuto at harmonically crucial points-- does not apply to this music.

Level: Some of what is asked of the violinist in these etudes is (I hesitate to use the word) impossible. Who in the world (besides a computer) is capable of achieving the requirements of Etude I, seconds 15-16, for example? Six events occur in less than 1/4 of a second—all played above the sixth position, each with a different dynamic, some microtonally inflected, some sul ponticello or sul tasto.

Value: The Freeman Etudes would be much more valuable as performance pieces or pieces for compositional study than as etudes to be used to improve specific aspects of violin playing. All aspects of these etudes—rapid changes of timbre and dynamic, rhythmic events estimated in relation to seconds, microtonality, unprepared high notes, dissonant intervals, and ear training—can be addressed in a simpler, more practical context. (Many other studies presented in this monograph, in fact, do exactly that.) The violinistic acrobatics required to switch between playing styles such as pizzicato, arco, ponticello, col legno battuto, and so on are useful preparation for some twentieth-century repertoire. Readers should refer to the discussion of mental preparations under “other difficulties” found in Hans Ulrich Lehmann’s Arco (pp. 188-189). If the etudes are to be used for the purpose of study, then a slower tempo should probably be used. The player must not allow him/herself to play with poor intonation and execution of extended techniques while striving for a faster tempo. To do so will cause a denigration, rather than an improvement, of one’s technique.

Ozim, Igor (Compiler and editor)

Pro Musica Nova: Studies for Playing Contemporary Music (1971-1986)

General Remarks about the Collection

This collection, compiled by Igor Ozim, contains twelve performable works for unaccompanied violin. The pieces also reveal certain technical and musical challenges of music in a late twentieth-century style, and, for this reason, Ozim presents them as etudes. Ozim carefully selected whole pieces (many of which were composed specifically for his project), single movements and excerpts which reflected specific styles and technical problems in twentieth-century music. Ozim writes in the Preface, “The compositions have the character of studies. Each treats in detail a specific technical detail found in new music, without, however, exceeding a certain level of difficulty.”³⁴ His notes at the end of the work are extremely valuable and insightful in terms of pure information and advice to the player.

The collection is the only one in this monograph devoted exclusively to music in a late twentieth-century style. Since many of the studies were originally performance pieces (or part of them), the degree of musicality and expression is very high overall. Any of the works could be performed in public, though, despite Ozim’s statement to the contrary, many of them are quite complex. The studies explore a plethora of styles, extended playing techniques and technical problems. Some of these include, minimalism (No.2), serialism (No. 4), aleatory aspects (Nos.5 and 6), eclecticism (Nos. 7, 10, and 11), microtonality (Nos. 3, 8, and 10), exaggerated bow speed and/or pressure (No.7), tapping the strings with the screw of the bow (No. 11), glissandi (No. 5), whistling (No.12),

³⁴ Igor Ozim, Pro Musica Nova: Studien zum Spielen Neuer Musik, (Wiesbaden: Breitkopf and Härtel, 1986), 3.

unprepared high notes (No. 9), rhythmic complexity (No. 8), and training of the ear, the mind, and the left and right hands, in general.

Krek, Uroš

Impromptu (1985)

Composer Biography

Slovenian composer Uroš Krek (b Ljubljana, 21 May 1922) studied composition with Škerjanc at the Ljubljana Academy of Music and graduated in 1947. He worked for Ljubljana radio from 1950 to 1958 as producer of orchestral music and director of the music program. He worked on research projects in the Ljubljana Ethnomusicological Institute from 1958–67, and taught composition at the Ljubljana Academy until his retirement in 1982. He is a member of the Slovenian Academy of Sciences and Arts. Krek's early works were mostly neo-Classical in style, and included Slovenian folk music elements. Later, he began employing 12-tone techniques as he evolved into an Expressionist.

Works with Violin

Vn Conc., 1949; Sonatina, str, 1956; Rapsodični ples, 1959; Hn Conc., 1960; Inventiones ferale, vn, orch; Sonata, vn, pf, 1946; Sonata, 2 vn, 1972; Duo, vn, vc, 1974; Str Trio, 1977; Str Qt, 1980; Streichsextett, 1990

Composer	Krek, Uroš.
Title	<u>Impromptu</u> (1985)
Style	Free atonal, declamatory folk element with abstract melodic chromaticism
Level of difficulty	Intermediate
Left hand difficulty	Chromatics with “skipped” notes and different patterns on one string and multiple strings; glissandi.
Right hand difficulty	Coordination; string crossings; 20th-century sound, expression and intensity
Other difficulties	
Value	Late 20th-century musicality and style; broken chromaticism; ear training and rhythmic training
Musicality	Many indications for character, color, tempo, sound, dynamics, phrasing, shaping, and structure
Meter	None/mixed; without pulse until 5 bars before C (♩ is constant)
Tempo	♩ = approx. 160, giusto (fast, especially letter A)
Rhythmic difficulty	Medium; sixteenth note triplets, quintuplets, sextuplets

Style: Impromptu has the feeling of a declamatory folk-style narrative due to the repetition of the G -G octave at phrase beginnings and interruptions. Lots of harsh melodic and harmonic dissonance and chromaticism are used to give this work a dark, intense tone. The opening sets forth a process of intervallic and registral expansion which does not reach its climax until one bar before [E]. For example, the low G3 of mm. 1-2 becomes a semitone (A-flat to G) in m.3-7; the m3rd then dominates the sequential melodic patterns of mm. 8-11, and so on. A bagpipe imitation is first introduced in one bar after [B] with the open, pure sound of P5ths and glissandi. “Thus, traces of elements of folk music appear at intervals throughout the work, and the interpretation should be considered in this light.”³⁵ This same material returns in the form of a condensed retrograde at [D]. The use of the open strings of the violin in these sections produces a characteristic folk music sound and becomes motivically important to the work as a

³⁵ Igor Ozim, Pro Musica Nova: Studien zum Spielen Neuer Musik, (Wiesbaden: Breitkopf and Härtel, 1986), “Remarks and Explanation of Signs,” 3.

whole. In fact, the piece concludes with a pizzicato chord made up of the four open strings plus a C#, and this motive is what dominates the final thirteen bars. Another important idea in this fifth, and final, section is the technique of centering. Here, as in the very opening of the piece, the note G is framed by the upper and lower neighbors F# (G-flat) and A-flat.

Left hand difficulty: Chromatics with skipped notes and different patterns on one string (mm. 1-2) and multiple strings (letter [A]) are unpredictable for the ear and the fingers. Fast shifts, small and large, are required one before [B] and three before [E] to [E]. Melodic and harmonic intervals used include major 7ths (6 before [A] to [A]), minor 9ths (4 before [A]), P5ths ([B] and [D]), and a combination of 6ths, tritones, P4ths, and melodic 3rds, which dominate the climax before [E].

Musicality: The phrasing is declamatory in nature, with ideas being introduced, reintroduced and expanded. “Each technical problem arose from the music itself and is subordinate to the work as a whole. The more variety and finesse with which the rudimentary indications are interpreted, the more authentic will be the flow of this basically simple piece.”³⁶ The player should strive for a sense of rhythmic freedom and natural improvisatory rubato without allowing the tempo to become too sluggish. During the compositional expansions, new ideas should be emphasized, as they appear in order to avoid monotony in the repetition. Also, allow some room for growth and intensification in the repetition of the opening statement.

³⁶ Ozim, *Remarks*, 3.

Niehaus, Manfred

Canon for four Violins (1973)

Composer Biography

German composer and violist, Manfred Niehaus (b Cologne, 18 Sept 1933), is primarily known for his music for theater and for amateurs. Early studies took place at the Rheinische Musikschule and at the Cologne Musikhochschule with Bernd Alois Zimmerman, among others. He worked for the West German Radio as editor in the music department and jazz editor from 1977 to 1989. He has also served as an improvising violist for Gruppe 8, the Russian-German Composers Quartet and other ensembles. “He is known chiefly for pieces of absurd or surrealist music theatre, small in scale, flexible in form and designed for studio or workshop venues. He has also worked intensively in music for amateur performers and has championed the deritualization of performance through ‘open’ concert forms and communal musical activities.”³⁷

Works with Violin

Vn Conc., 1966; Vn Conc. no.2, 1991–2

³⁷ Monika Lichtenfeld, The New Grove Dictionary of Music and Musicians, ed. Stanlie Sadie (London: Macmillan Publishers Limited, 2001), 17 : 885.

Composer	Niehaus, Manfred.
Title	<u>Kanon für vier Violinen/Canon for four Violins (1973)</u>
Style	Post-tonal, with minimalism
Level of difficulty	Intermediate
Left hand difficulty	
Right hand difficulty	Variety of strokes; string crossings.
Other difficulties	Mental concentration
Value	Minimalism; rhythmic training (uneven groups); right hand training; mental concentration
Musicality	Minimalist sense of rhythmic and metric playfulness and interaction of canonic procedures; variety of dynamics, articulations and effects
Meter	None given, but 6/2
Tempo	Half note = 54 (moderate)
Rhythmic difficulty	Complex; ♪ quintuplets, sextuplets and septuplets; pulse is often uneven and syncopated.

Style: In “Canon for Four Violins”, the pitch language is post-tonal, though the piece is clearly built more on its rhythmic and canonic procedures. Parts 1 and 2 (Lines 1 and 2) use an ambiguous C Major/a minor collection and combine contrapuntally to form a variety of intervals (dissonant and mostly perfect and imperfect consonant). Line 3 is more complex, chromatic and disjunct and maintains a “g minor” sound despite clashing pedal G#s. The addition of Part 3 to the counterpoint increases the complexity and amount of dissonance immediately and significantly. Part 4 contains all of the above types of melodic material as well as a new passage (Part 4, Lines 2-4) with only two pitches, F# and D#. These two pitches will obviously clash dissonantly against the pitch collections of Parts 1-3, thus creating a language that varies significantly in terms of its level of harmonic intensity.

Right hand difficulty: Whereas Parts 1-3 vary in dynamic, each of the lines of Part 4 adopts a different style of bowing or timbre. These various strokes and timbres include sul ponticello, sotto voce, martellato, spiccato, staccato molto, ordinario with

harmonics, and ordinario. The player(s) should use this as an opportunity to increase mastery of each of these strokes. Practice the passages at different speeds and in various parts of the bow. For instance, the spiccato stroke can be played in the lower middle, the middle, and the upper middle of the bow at different heights above the string in order to increase control of this stroke. Also, the “staccato molto” passage should be attempted with the original ricochet-style bowings in the upper middle with an emphasis on producing an extremely dry, short articulation. This same passage, as well as Part 3 and Line 1 of Part 4, contains large string crossings between the A- and G-strings. These crossings are best managed closer to the frog and with the hand bending at the wrist (rather than a very large, clumsy movement with the entire arm).

Value: Minimalism, mental concentration and rhythmic training with uneven groups are the most important aspects of this piece. Ozim notes that this study “...makes no special technical demands upon the performer other than a well-developed ability to play two, three, four, five, six, seven, eight or [nine] notes to a beat.”³⁸ This study also has obvious connections to minimalist works like Steve Reich’s Violin Phase for four violins or violin and tape. For training in this style, individual study of the part with a metronome will be useful, though the rhythmic interaction between the parts is a crucial aspect of the work’s purpose.

Rhythm and meter: Polytuplets with different subdivisions are used throughout the work. Obviously, metronome work is essential for the accurate interpretation of these rhythms. This is particularly true of Part 3 and lines 7-8 of Part 4, which contain written-out rhythmic accelerandos. The individual players must be self-reliant, for the rhythm will become far more complex and challenging when other canonic voices are

³⁸ Ozim, *Remarks*, 3.

superimposed on the original. The ensemble should “speak” the rhythms verbally (on a generic syllable like “da-di”) with and without a metronome for practice. Pay particular attention to the quintuplets and septuplets to make sure that the subdivisions are spread out evenly.

Terzakis, Dimitri

Violinstück I (Violin Piece I) (1985)

Composer Biography

Greek composer Dimitri Terzakis (b Athens, 12 March 1938) is primarily known for his use of melodic microtonal inflections in works that draw on the traditions of Byzantine and Greek folk music. From 1959-64 he studied the piano under Thurneissen and theory and composition under Yannis Papaioannou at the Hellenic Conservatory, Athens. He continued his education in Germany studying composition with Zimmermann and electronic music with Eimert at the Hochschule für Musik in Cologne. In 1974, he began teaching counterpoint and fugue, and, later, Byzantine music and composition (1989–94) at the Musikhochschule, Düsseldorf. He had additional teaching appointments at the music schools in Berlin, Berne and Leipzig. He also organized summer courses in Western and southeastern European music in his native Greece.

Terzakis's early works were post-tonal (Prelude and Legend) and serial (Sinfonietta) in style. By contrast, his later period consists of mostly monophonic works with micro-intervals and glissandi, which are typical characteristics of Byzantine folk music (vocal and instrumental). Despite his education and work in Germany and the cultural exchange between Western Europe and his native Greece, Terzakis has adopted a lyrical language. His understanding of “Western harmony, polyphony and the tempered system as constituting only an extended episode in the evolution of music” has led him to adopt a monophonic style in the tradition of the folk music of Greece, the Mediterranean, and the Near East.³⁹

³⁹ George Leotsakos, The New Grove Dictionary of Music and Musicians, ed. Stanlie Sadie (London: Macmillan Publishers Limited, 2001), 25 : 308.

Works with Violin

Vn Conc., 1986; other works- Str Qt, 1969–70; 3 Pieces, vn, 1972; Str Qt no.2, 1976; Musica Aeolica, vn, va, 1979; Str Qt no.3, 1982; Etude chromatique, vn, pf, 1984; Oktoechos, vl, hn, bn, 2 vn, va, vc, db 1988–9; Str Qt no.4, 1990; Myrrhentropfen, va, pf, 1993; Sonetto, va, pf, 1993

Composer	Terzakis, Dimitri.
Title	<u>Violinstück I/ Violin Piece I</u> (1985)
Style	Modal; Greek folk scales; monophonic
Level of difficulty	Intermediate
Left hand difficulty	Microtonality
Right hand difficulty	
Other difficulties	Ear training, microtonality
Value	Microtonality
Musicality	Highly expressive monophonic style (melodic) with “improvised” feel; opening and ending sections are more wild and energetic
Meter	Mixed: 3/4, 2/4, 1/4; quarter is constant
Tempo	Quarter = 80, quarter = 50 (Ruhig), quarter = 80
Rhythmic difficulty	Medium

Style: The language in Violinstück I is monophonic and is based on Greek folk scales and modes. Ozim’s notes state, “The piece makes use of quarter tones of the kind used in ancient Byzantine music, but also as used in contemporary Greek and Southern Slavic folklore. However, these are less mathematically divisible quarter tones than microintervals or slight raisings or lowerings of a note.”⁴⁰

Speaking freely, the opening sounds like d minor modal with a raised fourth scale degree (Lydian mode with sharp 4, G#) despite appearing to use a simple a minor collection (harmonic minor form). The opening emphasizes the centricity of d minor despite the raised fourth and lowered seventh scale degrees. The passage beginning from m. 4 (Ruhig) seems to be in c (minor) modal, with a sharp fourth scale degree (F#). By m.

⁴⁰ Ozim, *Remarks*, 4.

10 (or perhaps as early as m. 7), a (minor) modal is the collection, with the added sharp 4, D#. It remains focused on a (minor) modal and its “dominant,” E Major, until the end.

Left hand difficulty: The problem to overcome in this etude is the microtonality, from the points of view of ear training and left hand technique. Ozim’s notes go into this issue in detail. To summarize, the quarter tones are “slight raisings or lowerings of a note,” rather than “mathematical divisions.”

These notes are performed by letting the finger roll slightly upwards or downwards [bend the knuckle known as the proximal joint] on the string, but without actually shifting it along the string. In order to familiarize the ear and the finger with these minute intervals, play for example a C sharp as double stop with the second finger on the A string together with an open E string. Now roll the finger upwards until the audible combination tones of a minor third have disappeared, but before the “d” is attained (this can be easily checked with the open D string). After practicing a while, the ear can now hear the quarter tone very clearly; after all, it isn’t imperceptible! The finger also quickly learns to feel the distance. The same procedure applies to the downward quarter tone; the finger is now rolled in the direction of the scroll.⁴¹

The following exercise can be performed to “familiarize the ear and finger with these minute intervals”⁴² In addition, Ozim advises the performer to play with tempered intonation so that the quarter tones will be more apparent. “Of course, the normal half tones should not be stopped too closely, in order not to obliterate the difference between them and the actual quarter tones.”⁴³ Avoid using a lot of vibrato on the bent notes “...so that the effect is not blurred by too broad a vibrato, but also so as not to detract from the innate expressivity of the dull and lusterless sound of these tones, which have less resonance in the instrument than the normal tones.”⁴⁴

⁴¹ Ozim, *Remarks*, 4.

⁴² Ozim, *Remarks*, 4.

⁴³ Ozim, *Remarks*, 4.

⁴⁴ Ozim, *Remarks*, 4.

Musicality: This etude is musical, even though the musical indications by the composer are sparse. The musical aspects seem to be more important to the composer than the pedagogical ones, and Terzakis has likely allowed for interpretive improvisation by leaving the score fairly uncluttered of indications. The reason for this probably rests with the folk elements of the work. The composer very likely desires a high degree of interpretive creativity from the player, akin to the way in which a fiddler or gypsy musician would perform. In the notes to the piece, Ozim states, “The piece calls for a subtle rubato, such as that found in Greek folklore. The dynamic signs, which the composer only rarely provides, allow and even require slight dynamic shadings within the indicated limits.”⁴⁵

⁴⁵ Ozim, *Remarks*, 4.

Jensch, Lothar

Stück (Piece) (1982)

Composer Biography

Lothar Jensch (b. Hoechst/Main, 26 January, 1916) is known as a German composer. He studied with Seiber and Jarnach in Darmstadt.

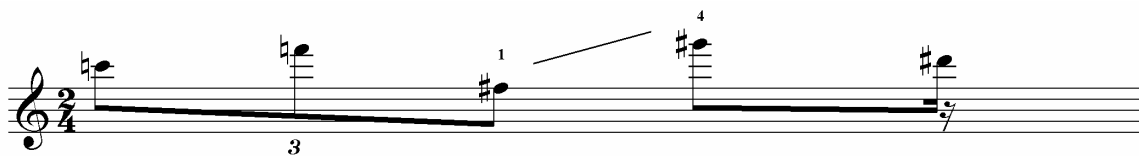
Works with Violin

Str Qt no.1; Str Qt no.2; Stück (1982)

Composer	Jensch, Lothar.
Title	<u>Stück/ Piece</u> (1982)
Style	Serial, twelve-tone (one row)
Level of difficulty	Intermediate
Left hand difficulty	Glissandi, extensions, large leaps
Right hand difficulty	String crossings, rapid changes of dynamics and articulations
Other difficulties	Coordination, mental work for rhythm; ear training
Value	Complex rhythms; twelve-tone style; instrumental effects
Musicality	Dynamics, effects, colors, articulations, styles, tempi, speed, accentuation, phrasing, gestures are all explicitly given; commas (') indicate brief silence (breath) between phrases
Meter	None; no bar lines
Tempo	Quarter = ca. 60 (slow)
Rhythmic difficulty	Complex; ♩ quintuplets, sextuplets and triplets; quarter quintuplets and triplets

Style: The pitches are organized into twelve-tone rows, but the compositional process differs from that of Second Viennese School serialism. Rather than drawing from a matrix of rows and permutations, one row is used and reordered throughout the piece. The original row, P₂, on lines 1-2 (D, E, B, C#, B-flat, A, C, G, F#, F, E-flat, A-flat) is constructed by tetrachords in a Webernian style. Each of the three tetrachords (D, E, B, C#), (B-flat, A, C, G), and (F#, F, E-flat, A-flat) forms the same palindromic [0235] set and is therefore the same, intervallically. If we observe the second row on lines 3-4 (E, C#, D, B, B-flat, G, A, C, F, F#, G#, D#), we notice that the tetrachords have remained

Left hand difficulty: Glissandi, extensions and large jumps are problematic when they appear in succession. On line four, for example, the first two beats should be played on the E-string; thus, the performer must shift from fifth to first position and then glissando back to sixth position in rapid succession. Refer to example 31, shown below. The player should practice the timing of the shifts to ensure that they start sooner, rather than later. Thus, after playing F, the hand begins to shift to F#. Once the F# is played, the hand immediately begins the shift to G#.



Right hand difficulty: As with other pieces, coordination is challenging in passages marked “as fast as possible.” Using a relatively small amount of bow on these figures will simplify the timing between left-hand finger placement and bow articulation. Disjunct lines create passages with extensions and shifts, string crossings, and “backwards” bowings. Players will find it advantageous to stay close to the string with

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the bow in such places. Rapid changes of dynamic and articulation (staccato, molto leggiero) are also called for.

Other difficulties: For twelve-tone ear training, practice with a piano and a tuner. Work to hear and play with tempered intonation. Pitches may be checked against open strings if the result produces a perfect interval. However, other pitches need to be evaluated from a stable source (such as a tuner) in order to insure precision, especially if this dodecaphonic writing is unfamiliar to the player.

Rhythm and meter: The performer should practice rhythms mentally without the violin. The goal with regard to the various quintuplets is to fit five notes evenly into one, two, or four beats. The metronome will be useful in this case for keeping a steady pulse against which to count. The player should verbalize the rhythms with a syllable, “da-da-da-da-da.” To this, conducting patterns should be added, along with walking and tapping.

From Ozim’s notes:

This piece, written in an open style, ‘senza misura,’ confronts the inexperienced player with several rhythmical problems due to the difficulty of grouping shorter notes together into larger units of the same size. Thus it is necessary to change the time unit frequently, from quarter-note to half-note to sixteenth-note and so on. Although the composer claims that he does not expect mathematically precise results, the relative duration of the notes among each other should be maintained in the proper proportion. The composer writes: *What is important to me is the relative length of duration of each note in relation to the others. Due to the abundance of such changes from rational and irrational values as well as fractions of values, the unavoidable resulting imprecisions in the performance have been taken into consideration. The music text presents a possibility, or rather a notated, written-out version of a possible result when the piece is played freely and without constraint.*⁴⁷

⁴⁷ Ozim, *Remarks*, 4.

Petrič, Ivo

Petite Pièce pour Souvenir (1972)

Composer Biography

Ivo Petrič (b Ljubljana, 16 June 1931) is one of the most important twentieth-century musical figures in Slovenia. At the Ljubljana Academy of Music, he studied composition with Škerjanc and conducting with Švara. In 1962, He founded the Slavko Osterc Ensemble, a small chamber orchestra of about twenty players. This ensemble, which he directed, was devoted to performing and recording twentieth-century music. He also held the position of artistic director of the Slovenian Philharmonic Orchestra from 1979 to 1995. This ensemble was also devoted to modern music, particularly that of Slovenia.

Petrič's early works were mostly neo-Classical, refined, economical, and appealing for rhythmic liveliness and melodicism. He was most influenced at this time by the music of Slavko Osterc and Hindemith and by his teacher, Škerjanc. During the 1960's and '70's Petrič began to explore the potential of new instrumental sound possibilities and a freedom of expression and rhythmic notation. His orchestral music often utilized "freely coordinated lines with a system of conductors' cues."⁴⁸ One of the most important works of this period is the lyrical, and colorfully orchestrated, violin concerto Trois Images (1973).

Works with Violin

Epitaph, cl, vn, vc, str, hp, perc, 1966; 3 images, vn, orch, 1973 ; Gemini Conc., vn, vc, orch, 1975; chamber and solo instrumental Variacije na temo Bele Bartóka

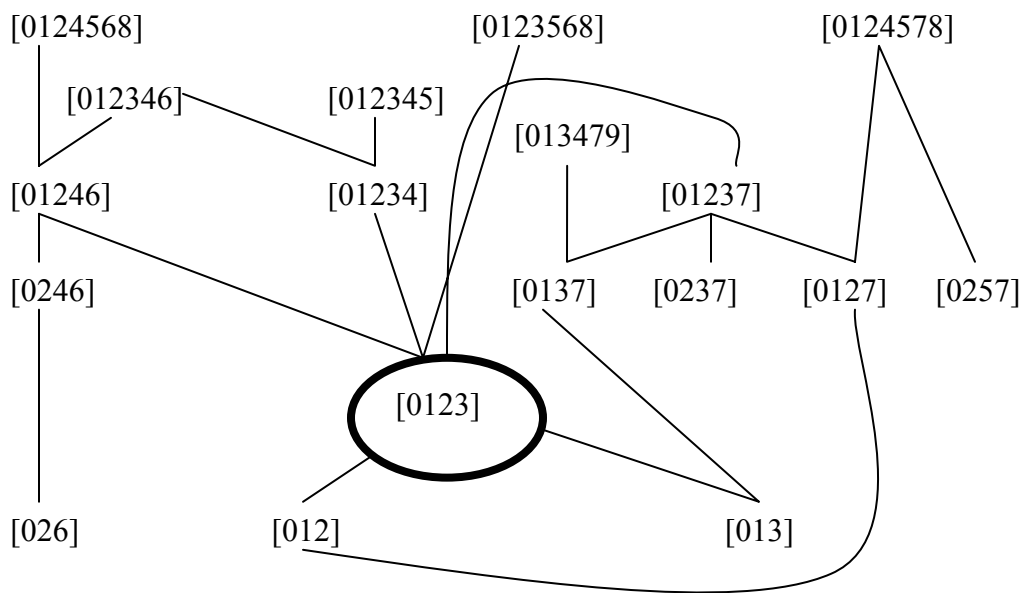
⁴⁸ Niall O'Laughlin, The New Grove Dictionary of Music and Musicians, ed. Stanley Sadie (London: Macmillan Publishers Limited, 2001), 19 : 507.

[Variations on a theme of Bartók], vn, pf, 1955; Str Qt, 1956; 3 esquisses, fl, str qt, 1961; Trije kontrasti [3 Contrasts], vn, pf, 1961; 7 mouvements, ob, cl, hn, tpt, hp, vn, vc, 1963; Petit conc. de chambre, ob, eng hn, b cl, hn, hp, str trio, db, 1966; Quatuor 1969, str qt; Meditacije [Meditations], pf trio, 1971; Autumn Music, vn, pf, 1974; Concert Improvisations, ob, vn, va, vc, 1974; Dialogi, 2 vn, 1975; Gemini Concertino, vn, hn, ens, 1975; Sonata, vn, 1976; Trio Labacensis, str trio, 1977; Nocturne d'été, vn, gui, 1978; Quatuor 1979, str qt, 1979; American Impressions, vn, vc, pf, 1980; Quatuor 1985, str qt; Rondeau, str trio, pf, 1987; Chbr Sonata no.2, fl, eng hn, vn, vc, hpd, 1991; Portrait d'automne, str qt, 1992; 2 portraits, 2 vn, pf, 1993; Elegy, eng hn, str qt, 1994; Hommage à Sergej Prokofjev, ob, cl, vn, va, db, 1994

Composer	Petrič, Ivo.
Title	<u>Petite Pièce pour Souvenir (1972)</u>
Style	Free atonal with performance indeterminacy
Level of difficulty	Intermediate
Left hand difficulty	Intervals (7ths and P4ths); glissandi of various types; microtonal effects; trills; high harmonics on A-string
Right hand difficulty	Col legno battuto; sul ponticello; ricochet
Other difficulties	Ear training, atonal and microtonal language
Value	Atonal style; indeterminacy; many unusual instrumental effects
Musicality	Numerous indications for dynamics, articulations, effects, shapes, colors, and characters
Meter	None
Tempo	No unit of pulse or general indication of tempo is given.
Rhythmic difficulty	Medium; very free

Style: Much is left up to the performer in this work. The improvisational or creative elements involve duration of pitches, choosing many of the pitches to be played (ahead of time or spontaneously), and the usual aspects like phrasing, sound, artistry, timing and rubato, which are left up to the discretion of the performer. The composer (Petrič) writes, “In this piece as well as in other violin works, I have perhaps best realized my concept of

an ideal sonority: a free aleatory style with a strong emphasis on all the technical possibilities and tone-color effects of the stringed instrument.”⁴⁹ The written (non-improvised) pitch material is atonal. It emerges organically from a network of sub- and supersets. These relationships in a Second Viennese School style are illustrated in example 32. The [0123] tetrachord, which combines the [012] and [013] trichords, acts as the focal point through which most of the sub- and supersets are connected. Also notice how the [026] (whole tone) family emerges separately but eventually becomes assimilated into the [012] and [013] culture at the pentachordal and hexachordal levels.



Ex. 32. Atonal sub- and superset relations

Left hand difficulty: Instrumental effects include high harmonics at (A) and challenging intervals (parallel 7ths after [G] and before [I], P4ths after [G]). In addition, glissandi are used with the following: single and multiple bows (fast and slow); downward, upward and meandering motion; saltato (jumping, leaping); too little finger pressure for noise effect at [D]; pizzicato at [F] and harmonics at [B]. Microtonal effects

⁴⁹ Ozim, *Remarks*, 4.

appear at letters [J] (1/4-tone trill) and [H] (vibrato). Trills marked “nervoso” are used after letter [D]. The technique involves playing with a fast trill and a wide vibrato motion to distort the pitch and sound. (Such techniques also appear in works like Crumb’s Black Angels.) Vibrato is controlled with the following marks: broadening, after letter [G] and before Lento; speed should be “slow,” a quarter tone *above* and below pitch. The high harmonics at [A] must be played on the A-string; these are playable, especially if the performer keeps the bow close to the bridge and presses the stopped left-hand notes well. Very high pitches at [E] are challenging because the contour must be followed while improvising specific pitches. Players should practice playing specific pitches (which may or may not be altered in performance) in order to avoid self-consciousness about faking passages.

Right hand difficulty: Instrumental effects for the right hand include the following: dense tremolo; col legno battute before letter [J] switching rapidly with arco normale; sul ponticello; arco and tremolo ricochet after letter [B]; dynamics, accents, gestures and shapes. For ricochet with deceleration, the composer advises the performer as follows: “Throw the bow and give a little pressure with the index finger so that the bow jumps quickly right at the beginning; then release the pressure of the index finger and simultaneously increase the bowing speed in order to slow down the jumping of the bow.”⁵⁰

Value: Petite Pièce pour Souvenir is an excellent study of aleatoric elements and instrumental effects. The piece does not present the player with too much of a technical challenge, and this allows for greater focus and attention to be placed on improvisation, gestures, timing, and exaggeration (in a good way) of the musical indications and details.

⁵⁰ Ozim, *Remarks*, 4.

Musicality: In his notes Ozim's writes, "This delicate, lyrical piece, the character of which is denoted by indications such as *eterico* (etheric), *grazioso*, *delicato*, *poco nervoso*, *etc.*, should be interpreted with much freedom and imagination. The composer attaches great importance to the duration of notes, and, above all, of the rests."⁵¹ The rests separate the gestures and create a fragmented sense of phrasing and an improvisatory style. While this style allows for great freedom, playing indications are very numerous and specific—dynamics, articulation, effects, shapes, colors and characters are notated for each gesture in the piece.

Rhythm and meter: No unit of pulse or general indication of tempo is given. Gestures are slow, fast, and medium, and are understood only in the way that they relate to each other. Silence, however, is notated in specific amounts by the different types of fermatas. See a list of illustrations of symbols provided in example 33. With no meter or tempo, the piece is very free, yet the notation of rhythms should be adhered to and estimated with precision. On line 2, at "c)", for example, the notes at the beginning should be closer together (i.e. faster), than the notes at the end, since the vertical lines are closer together at the left side of the barring. Refer to example 34 below. The composer also explains that note values vary from very fast to slow, depending on the given notation.

⁵¹ Ozim, *Remarks*, 4.

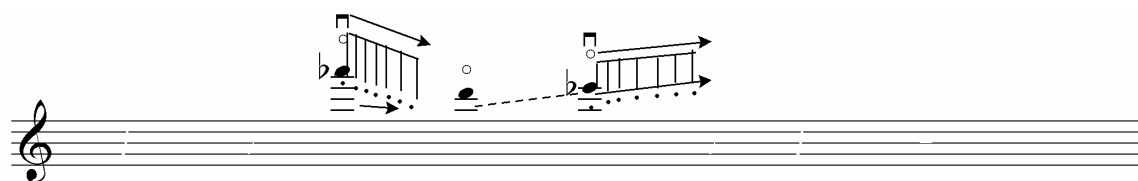
Note values from very fast to very slow:



Duration of the rests:

• (very short), √ (approx. 1-2 seconds), □ (approx. 2-3 seconds), ◌ (3 seconds and more)

Ex. 33. Duration symbols—note values and rest values with indeterminacy, from Ozim's remarks



Ex. 34. Indeterminacy of rhythm, pitch; noise effects using too little finger pressure, p. 1, line 2

Matičič, Janez

Chant I (1972)

Composer Biography

Another well-known composer from Slovenia is Janez Matičič (b Ljubljana, 3 June 1926). His early studies at the Ljubljana Academy of Music were in composition with Škerjanc and in conducting with Švara. He taught theory and piano at the academy in Ljubljana, until moving to Paris in 1959. While there, he took composition lessons with Boulanger, and was active in the Groupe de Recherches Musicales with Schaeffer (1962–80). During the 1980's he taught at the Ljubljana University and at various conservatories in Paris. His early works progressed from post-Romantic and Impressionist to neo-Classical. His subsequent works explored electro-acoustic possibilities and a more radical modernist style.

Works with Violin

Vn Conc., 1978–9; Chbr: Str Qt, 1949; Poeme lyrique, vn, pf, 1952;
Synthèses, vn, pf, 1969

Composer	Matičič, Janez.
Title	<u>Chant I</u> (1972)
Style	Atonal, with aleatoric element
Level of difficulty	Intermediate
Left hand difficulty	Large shifts; notes and passages on one string; glissandi (many types and speeds, with increasing vibrato takes practice); intervals (2nds and 7ths); controlled vibrato effects
Right hand difficulty	Straight tone; dynamics on one note; ricochet and tremolo
Other difficulties	Coordination; ear training, atonal language and dissonant intervals; concentration
Value	Variation of dynamics on a held note; glissandi; controlled vibrato; timbre; 7ths; large jumps; atonal
Musicality	Events are often isolated and fragmented
Meter	None; solid and dotted bar lines are given
Tempo	Quarter = ca. 66-69
Rhythmic difficulty	Complex but free

Style: The written material is atonal, and highly chromatic and dissonant. The network develops from a small [012] cell. The composed pitches are important because more of this etude is written out (less improvised) than in No. 5.

Level of difficulty: The atonal language, with lots of 2nds and 7ths, creates challenges for ear training. Additionally, performance is made complex due to the multitude of indications (dynamics, effects, etc.) and the rapid changes between “various manners of tone production.”⁵²

Left hand difficulty: Challenges include the following: large shifts; passages on one string (or two strings with double stops); large extensions [G]; glissandi (upward, downward, meandering, on one string, across four strings, with double stops [E], fast, slow, with pizzicato, with light finger [F], with vibrato [H]), and controlled vibrato effects, including wide, narrow and senza. Challenging intervals, such as 2nds and 7ths, are used (ex. before [J] and before [D]) as well.

Other difficulties: Ear training is important in this study, due to the atonal language and 7ths in high positions (beginning through [A], before [G]). Keeping track of the details is a challenge, because the tasks are numerous and diverse. Some are creative (improvisation), some imaginative (colors), some technical (executing large shifts, glissandi, and so on) and some involve simply observation of the composer’s indications, such as playing (*pp*<*f*><*p*) dynamics on a single held note, while changing from vibrato normale, to senza vibrato, to “vibrato increase crescendo”. The notes to the piece also specify that the notation can easily be misinterpreted, since trills are notated above the staff and vibrato effects are notated below the staff using a very similar jagged line.

⁵² Ozim, *Remarks*, 6.

Value: Matičič's objectives in this etude are stated explicitly in the notes. He writes, "This piece is an etude on the following elements: 1) variation of dynamics on a held note, 2) the use of various traditional elements (glissandi of various amplitudes, lengths, and speed), 3) controlled vibrato-non vibrato in performance, 4) various manners of tone production (--,>,sfz, pizz, con gliss, etc.)."⁵³

Musicality: "The form of the composition is primarily that of a consistent melodic line whose basically lyrical character is interrupted irregularly by short contrasting moments...The entire piece depends on the ability of the performer to imagine a wealth of different sounds. There are no limits to the performer's inventiveness in this respect!"⁵⁴ The phrasing and gestural indications are specific, various and numerous.

⁵³ Ozim, *Remarks*, 6.

⁵⁴ Ozim, *Remarks*, 6.

Kelemen, Milko

Cadenza of “Grand Jeu classique” (1982)

Composer Biography

Croatian composer and conductor, Milko Kelemen (b Slatina, Croatia, 30 March 1924), studied composition with Šulek at the Zagreb Academy of Music, with Messiaen and Aubin in Paris and with Fortner at the Freiburg Musikhochschule. He held a Humboldt Scholarship to study at the Siemens electronic studio in Munich during the 1960's. He held teaching positions in composition at the Düsseldorf Conservatory and the Stuttgart Musikhochschule. Kelemen was important in his native Croatia as an advocate for new music. He founded the Zagreb Biennale, which was devoted to the performance of avant-garde music.

Kelemen's compositional output can be divided into three stylistic periods. The early works of the 1950's were written in a style influenced by folk music. An avant-garde period followed, during which Kelemen experimented with musical structure. His final period, beginning with Grand jeu classique (1982), was an assimilation of earlier styles combined with a new use of intervals and harmony, which evolved into a form of polytonality. Kelemen makes use of a variety of contemporary techniques in his music, though he also returns to the archetypal or exotic as a means of expression.

Works with Violin

Grand jeu, vn, orch, 1982; Love Song, str, 1984; Phantasmen, va, orch, 1985; Motion, str qt, 1969; Varia melodia, str qt, 1972; Splintery, str qt, 1977; Sonette, str qt, 1987; Memories, str trio, 1988; Goodbye my Fancy, vn, pf 1998

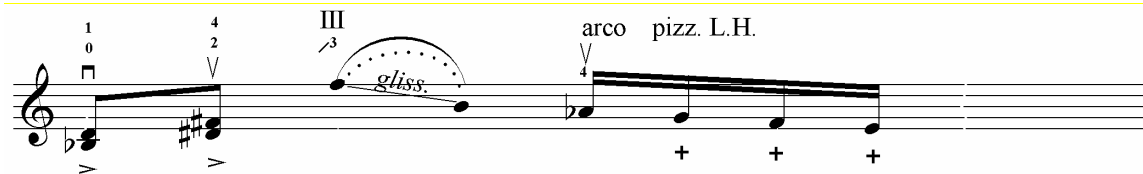
Composer	Kelemen, Milko.
Title	Aus: Kadenz zu/ from: Cadenza of <u>Grand Jeu classique</u> (1982)
Style	Free atonal
Level of difficulty	Advanced, especially for fast tempo
Left hand difficulty	Large fast leaps; intervals: 7ths, tritones, 6ths, 3rds; glissandi; left hand pizzicato with arco; harmonics
Right hand difficulty	20th-century effects; exaggerated bow pressure, sub ponticello, col legno battuto, ricochet, sul pont., Bartók pizz.
Other difficulties	Mental concentration; preparation in advance; coordination
Value	A very good study of 20th-century instrumental effects
Musicality	Interest comes by virtue of speed and timbral contrast, thus exaggeration of these elements will be effective
Meter	None; partial bar lines, dotted bar lines notated
Tempo	Quarter = approx. 132; “almost as fast as possible”
Rhythmic difficulty	Medium; unusual notation, but the actual rhythms are not very complex

Style: This study is classified as free atonal, since the sets ([015], [0348], [0124], and so on) have very little in common intervallically. However, the music is organized not so much by pitch as by contrasting groups of gestures in combination. For example, the opening sequence is as follows: Bartók pizz., ord., exaggerated bow pressure, pizz. sub ponticello, arco +left hand pizz., ord. chord, flageolet (harmonics), ord. rubato, vertical glissando, col legno battuto, and then back to the same Bartók pizz. chord to start a new sequence.

Level of difficulty: Again, as in No. 6, the specific technical requirements are not extremely difficult. The rapid change between various playing styles, effects, and musical gestures creates physical and mental challenges. The challenges are magnified the closer one gets to observing the composer’s tempo indication (quarter = approx. 132 and increasing).

Left hand difficulty: The fast, large leaps and awkward intervals create the most significant challenges in this area. In one such example, an alternate fingering is provided

which may simplify the movements. The new fingering allows the sequence to be played with a single shift from first to seventh position, rather than two consecutive shifts. See example 35 below for an illustration of the fingering.



Ex. 35. Fingering efficiency, p. 1, lines 4-5

Right hand difficulty: The composer specifies that “exaggerated bow pressure” figures should not be played too close to the bridge—pitches should be audible. On the other hand sul ponticello figures and harmonics should be played close to the bridge (or possibly on top of it for the ponticello), and sub ponticello chords are to be bowed behind the bridge. These bow placement adjustments in one dimension are combined with ricochet, saltato, col legno battuto, and arco plus left hand pizzicato (at the point) from the vertical plane (an intersecting dimension). The speed of the cadenza makes preparation a necessity, and, in particular, one movement must be connected to the next as smoothly and efficiently as possible. Thus, the player will devote a considerable amount of practice time to improving transitions from one event to another.

Other difficulties: Mental concentration and advance preparation are necessary to navigate the fast, and sometimes hazardous, changes between various extended performance techniques. In particular, when the bow is lifted and placed behind the bridge, the preceding up-bow must already be lifting and moving towards the bridge and beyond. In addition, certain combinations are especially awkward for their physical choreography and mental juggling. One such sequence appears on line 10 as follows: tremolo, col legno battuto, Bartok pizzicato, arco plus left hand pizzicato.

Musicality: This study is an extract (the cadenza) from a larger performance piece “Grand Jeu classique,” for violin and orchestra. Although the composer indicates *ff* as the dynamic throughout, the performer is undoubtedly expected to vary the dynamics as s/he sees fit. The musical idea is also rather simple—to begin fast and loud and increase the speed and intensity until the end. (The composer even indicates, “Faster and faster until absurdity” at [F].) The variety of playing styles, percussive effects, colors, articulations, and gestures is apparent even if dynamic contrast is not notated.

Rhythm and meter: The notation is unusual, but the actual rhythms are not very complex. Partial and dotted bar lines are notated (probably for convenience), though cadenzas are typically played in a free manner.

Denisov (Denissow), Edison (Vasil'yevich)

Sonate, 2. Satz/ Sonata, 2nd movement (1973)

Composer Biography

Edison Denisov (b Tomsk, 6 April 1929; d Paris, 24 Nov 1996) was one of the most important Russian musical figures of the generation after Shostakovich. He began studying piano and composition at the Tomsk Music School around 1946 and physics and mathematics at the Tomsk University. He was also taught privately by Shostakovich, who encouraged him to pursue a career in music (rather than engineering) and to study with Shebalin at the Moscow Conservatory. Denisov improved his understanding of formal, and phrase, structure and gained a sense of discipline to his craft. He later taught at the Moscow conservatory analysis, counterpoint, and orchestration. He eventually became professor of composition, a position that he was denied until the fall of Soviet regime.

He was important as a composer, as an avant-garde ideologue, a teacher, and as a link between Russian composers and western European composers. Foreign composers established contacts with Russian composers through Denisov, who also introduced his countrymen to foreign music by making his home a place for listening and discussion. He was singularly responsible for introducing the music of the most important Russian musical figures, including Schnittke and Gubaydulina, to the West.

His compositional influences were remarkably varied; besides the Russian tradition set forth by Shostakovich, Prokofiev, and Glinka he was also exposed to many composers from the West, including Hindemith, Bartok, the Second Viennese School, Messiaen, and various 'Western avant garde' including Boulez, Stockhausen and Ligeti.

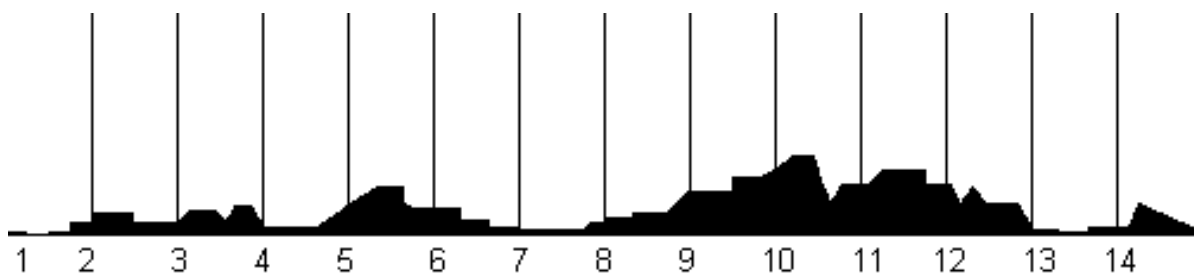
Denisov's String Trio(1969) uses a quotation from Schoenberg's String Trio and is stylistically influenced by the styles of Webern and Boulez. The heterophony of texture is highly chromatic, though also static, in ways reminiscent of such composers as Ligeti, Boulez, and Messiaen. His middle period works (including film scores for the Taganka Theatre) are marked by experimentation (with electronic music and graphic notation, among other things) and an eclectic mixture of stylistic references, including cabaret music, Duke Ellington and music of the Catholic Church. Denisov's Requiem, a non-religious work composed late in his life, is considered one of the most important Russian works in the latter part of the century.

Works with Violin

Vn Conc., 1977; Partita, vn, chbr orch, 1981; 5 Caprices of Paganini, vn, str, 1985; Pf Trio, 1954 [dedicated to Shostakovich]; Trio, cl, bn, vn, 1957; Str Qt no.1, f, 1957 [lost]; Sonata, C, 2 vn, 1958; 3 p'yesī [3 Pieces], vn, pf, 1958–62; Str Qt no.2 'in memory of Bartók', 1961; Sonata, vn, pf, 1963; Romanticheskaya muzika [Romantic Music], ob, hp, str, trio, 1968; Str Trio, 1969; 2 Homages to Bach, vn, org, 1982; Sonata, vn, org, 1982; In Deo speravit cor meum, vn, gui, org, 1984; Es ist genug, va, pf, 1984, arr. va, fl, ob, cel, str qnt, 1986 ob, cl, vn, va, vc, 1984–5; Qt, fl, vn, va, vc, 1989; Dedication, fl, cl str qt, 1991; 4 Pieces, str qt, 1991; Sonata, vn, 1978

Composer	Denissow (Denisov), Edison
Title	<u>Sonate</u> , 2. Satz/ <u>Sonata</u> , 2nd movement (1973)
Style	Free atonal with microtonality
Level of difficulty	Advanced; rhythmic and microtonal complexity
Left hand difficulty	Complex microtonality with double stops; intervals (parallel 7ths, 2nds and 9ths, also tritones, unisons and P5ths); high harmonics
Right hand difficulty	
Other difficulties	Ear training; mental concentration for rhythm
Value	Microtonality; complex rhythmic training with popular ratio notation
Musicality	Highly expressive; phrases and gestures separated by silence (rests of various lengths)
Meter	None; no bar lines or divisions
Tempo	Lento; very slow; lack of any sense of pulse
Rhythmic difficulty	Complex

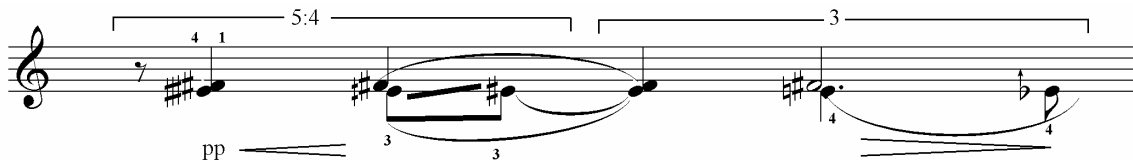
Style: In Denisov’s densely chromatic, dissonant and microtonal writing, important pitches are centered. Starting usually from a single pitch, the harmony will diverge chromatically, then converge temporarily back to a single pitch. The middle of line 3 emphasizes “A” this way, then “D-flat” on line 4, “A” on the end of line 5, and “D” in the middle of line 9. The formal structure is illustrated with a density graph based on dynamics, register, intervallic range, and rhythmic activity. See example 36, shown below.



Ex. 36. Form chart with density graph; numbers correspond to each of the fourteen lines of music in the sonata movement

Left hand difficulty: Harmonic and melodic intervals with microtonal alterations create problems for technique and intonation. Some of the intervals used include parallel 7ths, 2nds and 9ths, as well as tritones, P5ths and unisons. A strange fingering technique at “c)” involves using finger pressure to achieve a microtonal alteration on one note of a P5th. Microtonality is more complex in this study than in Study No. 3 of this collection (Violinstück 1 by Terzakis). The knuckle-bending technique, as described in Terzakis’ piece, is usable only part of the time in the present study by Denisov.

In some cases, microtonal effects must be realized by placing fingers slightly higher or lower to produce alterations directly (rather than through bending). For example, if the first alteration in the piece, the B-flat on line 1, is bent, then the glissando will be difficult to produce. The technique is also more difficult with double stops, because in some cases one note will be held while another is altered. The performer must figure out a way of bending, or sliding, the finger to alter one pitch without changing the other pitch at all. Bending is good because it sounds obvious that the pitch is being altered; however, to hold the other finger in place is difficult and causes tension in the fingers and the hand. Thus, each player should experiment with both techniques in a given situation and choose the most successful one. Example 37 from line 2 is shown below. The F# is held, while the bottom note changes from E# $\frac{1}{4}$ ↑, to E $\frac{1}{4}$ ↑, to E#, to E-natural, to E-flat $\frac{1}{4}$ ↑. As in Terzakis’ piece, avoid using too much vibrato with microtones because the effect becomes obscured. “Espressivo” should come more from the right hand—the player should lean on the quarter-tone-inflected notes with the bow to enjoy the unusual sonority (and so the audience will understand that those notes are “out of tune” on purpose!)



Ex. 37. Microtonal inflections with glissandi notation, p. 1, line 2

Other difficulties: Ear training with microtonality is very challenging, and, as Ozim suggests, Study No. 3 (by Terzakis) should be learned before No. 8 because the double stops make No. 8 more complicated for the ear and the left hand. First practice double stops and chords without quarter tone inflections. Then take short phrases and practice without—with—and without inflections. Continue to check intonation of perfect intervals with open strings, or with an electronic tuner, whenever possible.

Musicality: Like the previous study, this sonata movement is taken from a performance work. The composer writes “*espressivo*” on many of the phrases (approximately eleven times in two pages) and clearly shows small-gesture and long-line phrasing shapes with dynamics (<>). A variety of articulations, colors (*sul tasto*), and effects (tremolo, glissandi, trills) enhance the dissonant, chromatic, microtonal writing.

Rhythm and meter: This aspect of the movement is complex to the extreme; the difficulty arises from the fact that almost all of the rhythms are notated as triplets, quintuplets and septuplets—so-called straight rhythms are abnormal in this movement. Thus, in example 38 from lines 1-2, the most unusual rhythm is the eighth and dotted-eighth, sixteenth figure on line 2 (preceding the eighth note rest). To make matters worse, the unit of subdivision is constantly changing. Additionally, the triplets, quintuplets, septuplets, and so forth, are being both contracted into a shorter amount of time (as in 5:4) and expanded into a larger amount of time (as in 5:6). 5:4 means that ♪♪♪♪ will be played (faster than usual) in the time of ♪♪♪♪. 5:6 means that five notes will be played

slightly slower to fit *evenly* into the space of six of the same note value. All of this is observable in the first two lines of the movement (illustrated below in example 37); the unit of subdivision changes from quarter note triplet to sixteenth quintuplet to eighth triplet and, on the second line, a straight eighth rhythm is followed by five sixteenths being expanded into the time of six.

Ex. 38. Straight rhythms within an irregular rhythm context with ratio notation, p. 1, lines 1-2

Do lots of mental work for the rhythms. Set the metronome on a slow tempo, such as quarter note = 50, and speak the subdivisions verbally. Even if the smaller subdivisions are not articulated, they should be spoken at first. Thus, rhythms like the one from line 1 of Denisov (example 39 shown below), should be verbalized “1-2-3-4-5” (or “ta-ta-ta-ta-ta”), evenly in the space of one quarter note pulse. The player should consider a few things with regard to the work with a metronome in this movement. Approach each rhythm separately at first; then piece several together in sequence. Anyway, the performer will want to stop to realign the pulse so that each new triplet, quintuplet, etc. will begin on a strong quarter note beat. In addition, add the eighth note subdivision when counting 5:6 or 7:6 rhythms. The extra eighth note will help you keep track of all six sixteenths—then figure out how to fit five or seven sixteenths evenly into the space of six. Lastly, do not attempt to decipher these complex rhythms while playing. The rhythms

should be worked out mentally and physically by verbalizing, clapping, tapping one hand while conducting with the other, and so on. When the rhythms are internalized, they should be felt and understood naturally. Only then should the player begin the process of performing the rhythms with the violin. At the beginning of this process, focus on the rhythm and the notes—do not add expression and microtonal inflections until later in the learning process. Following these steps will save time and avoid inaccuracy and frustration.



Ex. 39. Using syllables to count irregular rhythms, p. 1, line 1, beat 3

Maderna, Bruno [Brunetto]

Pièce pour Ivry (1971)

Composer Biography

Composer and conductor, Bruno Maderna (b Venice, 21 April 1920; d Darmstadt, 13 Nov 1973), was an important influence in his native Italy during the mid-20th century. He introduced important avant-garde works through his teaching, conducting, and through his own compositions. Maderna, though influenced by contemporaries such as Nono, Stockhausen, Berio, and Boulez, nevertheless remained true to his own sense of melodicism within complex textures and in his interpretation of the open (aleatoric) work.

Works with Violin

Violin Concerto, 1969 String Quartet, before 1946 String Quartet, 2 movts, 1955
Per Caterina, vn, pf, 1963 Widmung, vn, 1967 Serenata für Claudia, vn, cemb, 1968
Pièce pour Ivry, vn, 1971 Viola (Viola d'amore), va/va d'amore, 1971 Ständchen für
Tini, vn, va, 1972 Amor di violino (radio play, E. Carsana), 1959–60

Composer	Maderna, Bruno
Title	Aus/from: <u>Pièce pour Ivry (1971)</u>
Style	Free atonal
Level of difficulty	Intermediate
Left hand difficulty	Unprepared high notes; glissandi; harmonics; intervals (tritones, 3rds, 2nds, 7ths, and P5ths)
Right hand difficulty	Sound; balzato bowing; phrasing; dynamics; expression; colors; articulation
Other difficulties	
Value	Good for sound; late 20th-century style; effects; timbres; ear training; left hand work
Musicality	An expressive work with concentration on sound and timbre
Meter	None
Tempo	Quarter = 52-60 (slow)
Rhythmic difficulty	Complex

Style: The free atonal language in this study is highly chromatic and dissonant. Important pitches are centered, as in Denisov's piece, but in a more subtle way. On line 1, beats 1-3, "G" is centered by F# and A-flat. The subtlety arises from the lack of clear phrase endings, so a centered pitch reigns important for only a brief time.

Left hand difficulty: Included in the piece are a wide variety of harmonics, such as those: with double stops, at the 4th, 5th and 3rd, and with glissandi. The intervals used also create intonation difficulties: high P5ths (Structure A, line 3); tritones, 3rds and 2nds (Structure J, line 2); and 2nds and 7ths (Structure K, lines 3-4) predominate. Extended techniques like left hand pizzicato are also used.

Unprepared high notes present a specific type of challenge. Ozim explains, "In these fragments, there are a considerable number of free entries on high notes which can present considerable difficulties for those who do not have perfect pitch. It is recommended to play these passages on the piano at first so that the ear can get accustomed to the sounds. Only when the performer hears exactly what he wants to play before playing it, it is possible for the hand to find the right notes and, if necessary, instantly to correct a note which is not quite in tune."⁵⁵

Right hand difficulty: Sound is very important in this study—the player must work for good contact with the bow, good tone, and beauty of sound.

Musicality: Ozim states, "For this collection I have chosen four from among the seventeen 'structures,' as the composer calls them, of this work which is enormously interesting from an artistic point of view, as well as from that of violin technique. The performer is free [per the composer's instructions] to combine them as he pleases, where by he can repeat various sections, and thus construct 'his own' work according to his

⁵⁵ Ozim, *Remarks*, 5.

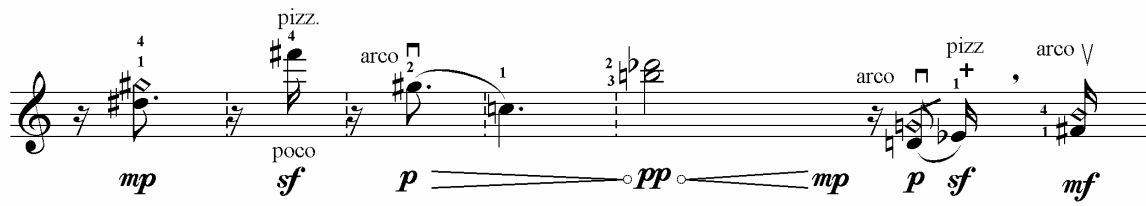
taste.” He also points out, “The fragments are composed in an open style, without bar lines.”⁵⁶

Pièce pour Ivry makes use of the violin’s expressive and timbral potential; harmonics at the octave, the fourth, the fifth and the third as well as pizzicato harmonics, double stop harmonics, and double stop with harmonic plus natural notes, are all used. Specific strings are notated for timbral effect, particularly certain notes high on the G- and the A-strings. Markings such as “flautando,” “svanendo (fading, vanishing),” “intenso,” “sonoro” (resonant), “espressivo,” “balzato” (leaping, jumping), and “sciolti” (easily, freely) as well as a variety of articulations, dynamics and effects like glissandi and left hand pizzicato, add variety to the piece and requirements on the player.

Rhythm and meter: Rhythm is somewhat free, but the music still has pulse, which must be maintained and realigned at various points. The absence of bar lines causes one to lose the sense of whether a particular rhythm is beginning on a weak beat or a strong beat. This effacing of the pulse is also emphasized by rests, commas, and grace notes. The player should realign the pulse mentally in order to simplify the counting of certain rhythms, but do so without playing a rhythm as an accented (syncopated) offbeat or as a strong downbeat. For a simplification of the counting see example 40 from Structure A, line 2, where the half-note in the middle of the bar is realigned to be felt as a strong beat. It may also be advisable to add some bar lines in mentally at the beginning of the learning process. Ozim instructs the player, “To divide the larger units into smaller ones, thus e.g. quarter notes into eighths, triplet eighths, or

⁵⁶ Ozim, *Remarks*, 5.

even sixteenth notes.”⁵⁷ This essentially means that the player must subdivide larger rhythmic units into smaller ones.



Ex. 40. Mental metric realignment shown with dotted bar lines, p. 1, Structure A, lines 1-2

⁵⁷ Ozim, *Remarks*, 5.

Lehmann, Hans Ulrich

Arco (1972/3)

Composer Biography

An important figure of contemporary music in Switzerland, Hans Ulrich Lehmann (b Biel, canton of Berne, 4 May 1937) studied the cello with Rolf Looser at the Biel Conservatory, theory with Paul Müller-Zürich at the Zürich Conservatory, composition with Boulez and Stockhausen at the Basle Musikakademie, and musicology with Kurt von Fischer at Zürich University. He later held teaching posts at the Basle Musikakademie, Zürich University, the University of Berne and the Zürich Conservatory.

Inspired by lyric and ‘concrete’ poetry, Lehmann's works include a diverse sound palate and “nuanced shaping of quiet moments.”⁵⁸ His music of the 1960’s shows the influence of total serialist composers such as Boulez. Lehmann’s later works became freer and more intuitive in terms of formal design and durational notation. The latter was also precipitated by his personal relationships to the musicians for whom the pieces were written. Not surprisingly, he also enlisted their active participation in the creative process.

Works with Violin

Sonata ‘da chiesa’, vn, org, 1971; Str Qt, 1987–8

⁵⁸ Christoph Steiner, The New Grove Dictionary of Music and Musicians, ed. Stanlie Sadie (London: Macmillan Publishers Limited, 2001), 14 : 495.

Composer	Lehmann, Hans Ulrich.
Title	<u>Arco</u> (1972/3)
Style	Free atonal, eclectic
Level of difficulty	Intermediate
Left hand difficulty	Microtonality; glissandi; high harmonics; intervals (m2nd, M7th)
Right hand difficulty	Various combinations of exaggerated speed, pressure and placement; effects (sul tasto, sul ponticello, tailpiece); great variety of strokes and dynamics
Other difficulties	Mental, switching suddenly between various effects with simultaneous changes of musical details (articulation, dynamic, etc.)
Value	An excellent study of extended performance techniques for the right hand; tremendous variety of bowing styles and timbres; deciphering notation; microtonal inflections
Musicality	Very musical performance piece with numerous indications of style, expression, timbre, rhythm, and speed; events are somewhat isolated by built-in silence, though they may be long gestures
Meter	None; intentionally free and arrhythmic
Tempo	Langsam (slow)
Rhythmic difficulty	Medium; irregular and free, achieved through calculated means and indeterminacy

Style: Pitches are emphasized through centering in this study, though the pitch language is less important than the eclecticism, the dynamics, the timbre, the rhythm and the instrumental effects. Throughout the first part of the piece, for example, G-natural is framed by F# and A-flat, though the music is organized more through freedom and control of rhythmic duration and timbral contrasts. In addition, the pitch language is (free) atonal and is not organized into a network of sub- and supersets. Rather, they simply make up part of the tapestry of percussive sounds and timbral effects in this piece. Interval class 1 is emphasized, in general, and D-natural is important in the second section (system 13, p. 4). The register expands outward from a D-natural unison, and “D” is emphasized through repetition and framing. The frame could be as small as a quarter tone or as large as a (B to F) m3rd frame. (This D-natural emphasis could be a direct reference to the cadenza of Bartók’s Violin Concerto No. 2, mvt. 1, mm. 302-311).

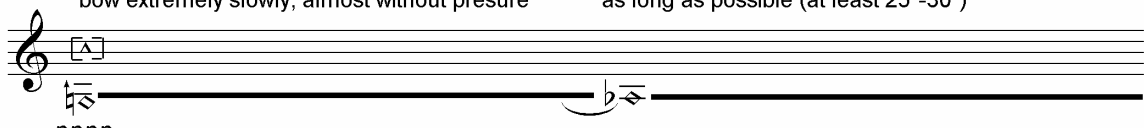
The formal design is binary; the first section consists of the music on pp. 1-3 (systems 1-12) and the second section on pp. 4-5 (systems 13 to the end). In the first section, a sense of freedom or randomness is mostly composed out. The second section adds more microtonality and generates the same free, improvisatory quality through greater indeterminacy.

Left hand difficulty: Glissandi with high harmonics and *gettato* (thrown, hurled) bowing are used. The technique with too little finger pressure is utilized in order to produce noise effects. The harmonic intervals of a m2nd and a M7th dominate. Rapid pizzicati with the left hand are required at the end of the piece. Thankfully, Microtonality in this work is simplified by the fact that all of the inflections are a $\frac{1}{4}$ \uparrow (not lowered). Because of this, the long microtonal passage at the beginning of the second section (p. 4) can be played with a slightly flattened (lowered back towards the scroll) left hand position. By playing more on the finger pads (as opposed to the fingertip, close to the nail), the technique of bending the knuckle to alter the pitches will be facilitated.

Right hand difficulty: The study contains a wide variety of strokes and timbres, which should be sharply contrasted with one another. Extended right hand techniques include the following: Too little—and too much—bow pressure, “tone completely crushed,” too little—and too much—use of the bow, and various combinations of speed, pressure and placement. Refer to example 41 from the opening of the piece, shown below. The composer indicates the following in an improvised passage at the end of the piece: “groups (unevenly long) legato-staccato-saltando; isolated battuto attacks; *gettato* and similar extremely varied bow pressure and bow speed; extreme *tasto* and *pont.* too,

tailpiece etc.”⁵⁹ Various strokes and articulations include long legato (p. 4), staccato, saltando (p. 2), col legno battuto, and gettato, with dynamics ranging from *pppp* to *fff*, *sffz*, and accents.

(slow)
bow extremely slowly, almost without pressure as long as possible (at least 25"-30")



pppp

bowing irregularities (flatterings, unevenness) should sometimes be somewhat audible

use only very little bow (1-2 cm), but great pressure
(→ tone completely crushed); always keep bow on the string



sub. *sffz* dim. molto lento (→ tip of the bow)

MM ♩ = approx. 96, however not quite even, but uneven in an almost imperceptible manner
(usually a little too soon or too late)

"a flat" somewhat stronger than "g" at the beginning, to be evened out gradually

The following variants can be distributed freely in the slow diminuendo:



pp-p
sub. outside of the diminuendo

turn the bow to the side (hairs legno), without bowing motion (grating sound)

Ex. 41. Notation and variety of extended performance techniques and timbres with indeterminacy, p. 1, lines 1-2

Other difficulties: The difficulty involves switching from one style to another. In fact, the right hand must execute the various strokes, styles, timbres, dynamics, and so on, but the real difficulty is for the mind. The mind can become overloaded with details and tasks to perform. To avoid frustration, the player should learn the piece in small sections.

⁵⁹ Ozim, *Pro Musica Nova*, Lehmann, 31.

In addition, s/he should spend a significant amount of time practicing mentally, without the instrument.

All of the symbols and written words on a given line should be looked at, understood and imagined physically and aurally by the player before s/he attempts to play the passage. At the beginning of p. 2, line 2, for example, the mind should imagine the following: place the first finger on F-natural (E-string) with too little pressure, while lifting the bow high above the string; strike the string with the wood (*col legno battuto*); place second finger on F# (D-string) with normal pressure, while simultaneously lifting the bow to the frog and very close to the bridge (*ponticello*); play the *sforzando* *ponticello*; add the trill as you move the bow away from the bridge and *diminuendo* to *ppp* and bend the knuckles down to play the $\frac{1}{4}$ \uparrow F natural; do not use vibrato (*s.v.*) and *diminuendo*. Imagine the sequence again within the space of 10-15"; imagine the smooth choreography of each movement, without jerkiness or hesitation; imagine the sounds that will be produced by each action. Only now should the passage be practiced with the instrument.

Musicality: Arco is a performance piece with numerous indications by the composer concerning style, expression, timbre, rhythm and speed. It contains a large range of effects and timbres (dynamics range from *pppp* to *fff*). The aleatoric ending instructions give a clear idea about the variety. For the right hand, Lehmann says, "Groups (unevenly long) legato-staccato-saltato; isolated battuto attacks; gattato and similarly extremely varied bow pressure and bow speed; extreme *tasto* and *ponticello* too, tailpiece, etc."⁶⁰ Harmonics at "'inappropriate' points on the string" produce strange squeaks and noises. The performer's musical aim should be to exaggerate the different

⁶⁰ Ozim, *Remarks*, 5.

sounds as much as possible and to realize the composer's goal of creating one unpredictable musical event after another.

Lachenmann, Helmut (Friedrich)

Toccatina (1986)

Composer Biography

German composer Helmut Lachenmann is known for his use of unconventional instrumental sounds and timbres. He attended the Stuttgart Musikhochschule, where he studied theory and counterpoint with Johann Nepomuk David and the piano with Jürgen Uhde. He also studied composition in Venice with Nono for two years. He later became professor of music theory and aural training at the Staatliche Hochschule für Musik und Theater, Hanover, and professor of composition at the Stuttgart Musikhochschule. He was influenced heavily by the avant-garde composers whom he met at Darmstadt, Nono in particular. He also studied the works and stylistic principals of the Second Viennese School, which led him to compose several works using serial procedures.

Beginning in the late 1960's Lachenmann began to expand his sound palate to include noise effects and loud, unconventional sounds. For instance in *Pression* (1969–70) for solo cello the player is asked to bow on the body and tailpiece of the instrument or on the strings with extreme pressure. His goal in removing the familiar sounds of the instrument was not to shock the listener, but instead to introduce them to a new, unspoiled sound world, which would allow them to hear without the built-in memory of thousands of previous works and accepted sonorities.

Works with Violin

Str Trio I, 1965, rev. 1993; Gran Torso: Musik für Streichquartett, 1971–2, rev. 1976, 1988; Str Qt no.2 'Reigen seliger Geister', 1989; (2 Studien, vn, 1973–4, withdrawn)

Composer	Lachenmann, Helmut.
Title	<u>Toccatina</u> (1986)
Style	Free atonal, eclectic; (like Cage and Crumb) more concerned with rhythm and (especially) timbre, rather than pitch
Level of difficulty	Advanced
Left hand difficulty	
Right hand difficulty	Tapping with screw of the bow at specific points along the strings
Other difficulties	
Value	This technique is not commonly employed
Musicality	
Meter	Mixed; uneven, using quarter and ♩ units of pulse
Tempo	Quarter = ca. 56 (slow)
Rhythmic difficulty	Complex, unpredictable patterns with changing meters, units of pulse and actions with the left hand as well as the bow (rhythmic dialogue or counterpoint)

Right hand difficulty: Essentially, the right hand assumes the role of the left hand in this etude, while continuing to perform its traditional function as the producer of sounds. The screw of the bow is used to tap the strings at specific points along their length. The difficulty lies in finding, as accurately as possible, the pitches that the left hand would normally play with the vertically held bow. The player must learn to find many of the pitches visually. Everything on the top stave is to be played two octaves higher. To make matters worse, the sounds produced are not the same as the pitches that are notated. Therefore, the sense of hearing will only be useful in terms of hearing interval-to-interval, and the sense of touch (to shift from one pitch to another) will have to be learned by the right hand. The wood part of the bow is also used to strike the strings at specific points in order to create *legno saltato* and *legno battuto* strokes.

Value: Unless this technique of striking the strings with the screw of the bow is explored to a greater extent by future composers, this etude will not have much practical

value as a learning tool. A violinist would have to devote a significant amount of time and effort to master the unconventional right hand techniques in this study, and, in the end, practical applications to the literature would be few and effectiveness in a performance questionable. Perhaps it could be useful preparation for those few pieces using this technique and for eclectic works like George Crumb's Black Angels, for the player must learn to find pitches visually—playing upside down, or in this case, with the screw of the bow. If performed, it would be very helpful to amplify the violin in order to make this effect more audible.

Huber, Nicolaus A.

Solo for a Soloist (1980/81)

Composer Biography

German composer, Nicolaus A. Huber (b Passau, 15 Dec 1939), has been an important radical voice in contemporary music in the latter part of the twentieth century. In the 1960's he studied composition with Bialas and electronic music with Riedl in Munich. He studied composition with Stockhausen in Darmstadt and in Venice with Nono. He later took a teaching position in composition at the Folkwang-Hochschule, Essen. His musical material was indebted to Stockhausen, while his understanding of this material in an historical context came from Nono. Huber was critical, not only of styles like serialism, but also of performance traditions like the use of crescendo, which he saw as "an element of bourgeois music of the 19th century, with its teleological connotations of build-up and climax."⁶¹

Beginning in the mid-1970s, Huber began to explore a new compositional process that he called 'rhythm composition'. In this style rhythmic models serve as generators of all aspects of the composition, including form, harmony, density, tone color, and so forth. For example, a Cuban guaracha is used as the rhythmic model in Morgenlied for orchestra (1980), a work that also contains an overtly political significance for its use of martial rhythms, a song of the French Resistance and an anti-Vietnam protest song.

Huber's later works are increasingly radical because of his aesthetic principals of 'desubjectivized' listening and 'aural unpredictability.'⁶² This manifested itself in the use of rhythmic repetition and new sonorities, particularly in the area of noise effects. For

⁶¹ Stephan Orgass, The New Grove Dictionary of Music and Musicians, ed. Stanlie Sadie (London: Macmillan Publishers Limited, 2001), 11 : 791.

⁶² Orgass, 591.

example, in Als eine Aussicht weit for flute, viola and harp (1996) “sheets of crumpled tracing paper ‘open out noisily’ of their own volition over prescribed periods of time...[creating] a musical space in which the nature of the sound is independent of the will of composer or performer.”⁶³ In Disappearances sounds are to some extent left to themselves, but the work also expresses an ‘extreme human and political bitterness’, recalling the ‘human beings who disappear in inhumanity, torture, concentration camps, gas chambers.’⁶⁴ Thus, his late works are a reinterpretation of sonic possibilities as well as the ability for art music to take on definitive political consciousness.

Works with Violin

Informationen über die Töne E–F, str qt, 1965–6; Chronogramm, cl, vn, vc, pf, 1966; von ... bis ..., vn, hmn, pf, perc, 1966; Epigenesis III, str, 2 perc, 1968–9; Versuch zu ‘Versuch über Sprache’, improvising insts, tape, 1970; La force du vertige, fl + pic, cl, vn, vc, pf + perc, 1985; Doubles, mit einem beweglichen Ton, str qt, 1987; Sonata, vn, 1965; Solo für einen Solisten, vn, 1980–81

Composer	Huber, Nicolaus A.
Title	aus: <u>Solo für einen Solisten</u> / from: <u>Solo for a Soloist</u> (1980/81)
Style	Tonal, traditional folk style
Level of difficulty	Intermediate
Left hand difficulty	
Right hand difficulty	
Other difficulties	Whistling; mental concentration; tap dancing
Value	Fun and stimulating for the mind and body
Musicality	An enjoyable piece with lots of physical and theatrical activity and timbral variety
Meter	Mixed, though no meter is given
Tempo	Rubato
Rhythmic difficulty	Complex

⁶³ Orgass, 591.

⁶⁴ Orgass, 592.

Style: The opening (Genre 1) is in a clear e minor. Genre 2 is (free) atonal, so the pitches used do not belong to a Second Viennese School system. The pizzicato notes at the beginning of Genre 2 are G, F, D-flat, and A, and they form a whole tone collection [0248]. Later, a combination of whistled pitches against bowed or plucked pitches forms various triads and dissonant intervals and chords. The bowed B-naturals and A-E harmonics on the last two systems hint at the E minor tonality of the opening melody. In this piece, and indeed in the traditional folk dance, the melody and the rhythm are simple and repetitive. The structure and energy are created through the characteristic *accelerandos*.

Level of difficulty: Intermediate, especially if the player is a good whistler. (I personally had difficulty with the higher whistled pitches, like the C#s and E#s on the last two systems—they are slightly above my comfortable whistling range.)

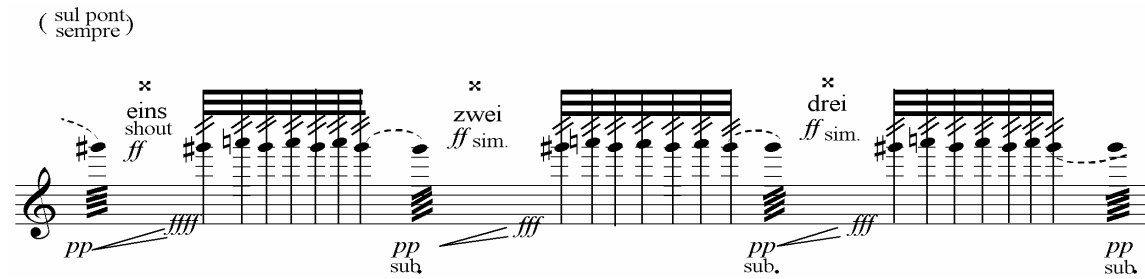
Left hand difficulty: The only challenging place is the setting of the pizzicato chord at the beginning of Genre 2. Visually and physically, memorize the shift on the D-string from first position to the F-natural in ninth position (or eighth, if you play this note with your second finger).

Other difficulties: If you intend to perform this piece, you may have to work to increase your whistling range and clarity. Approach this like a vocalist; perform simple exercises (arpeggio or scalar patterns); begin in a low range, and then transpose the patterns up by step as high as is comfortably possible. In this way, your range should gradually increase. Many players will likely struggle at the beginning to perform various tasks simultaneously. Perform each task separately at first (like practicing hands separately on the piano). Then put the instrument aside and mentally play a passage. In

Genre 2, for example, imagine the following sequence: set the pizzicato chord in the left hand; mentally feel yourself tap the right foot on beat 1; pluck the E-string on beat 2; tap the left foot on beat 3; as the right hand prepares to pluck the E-string, the right foot is waiting to follow on beat 4 and so on. Begin this learning process slowly and patiently (with a metronome), and try early on to imagine how the composite rhythm will sound and feel. The piece makes physical demands on the player, as well. The “tap-dance” or “Steppen” contains sixteenth-note triplets in Genre 2, system 4, which will give the performer a physical workout—older players may wish to consult their physician before attempting this!

Value: This piece is enjoyable and provides a good workout for the mind and the body. Some progressive music schools, like the Cleveland Institute of Music, require students to take a “eurhythmics” course—in it, the students learn to perform different rhythms in various combinations of clapping, walking, conducting and verbalizing. The ability to feel rhythms depends on one’s ability to internalize them physically. The intellectual multi-tasking work in this piece is applicable to a great deal of twentieth-century repertoire. Crumb’s Black Angels contains a difficult passage during which players must tremolo with active crescendos while chanting numbers in German.

Example 42, shown below, illustrates this.



Ex. 42. Mental multi-tasking; shouting numbers in German while simultaneously making a crescendo with the right arm, *Black Angels* (Part 7, violin 1)⁶⁵

Musicality: This type of folk dance is performed with many accelerandos. It begins slow, accelerates to a fast tempo, pauses, and begins again from a slow tempo, and so on. “What is intended is a hesitant beginning with uninterrupted accelerando and crescendo,” says Huber.⁶⁶ The music is most successful when the performer understands how to create intensity by playing on the back part of the beat before the accelerando begins. More than this, the player must feel, at the outset of each phrase, a boiling internal energy like that observable in Greek and Russian slow dances. The dancers move slowly, but with great intensity, and often enter a transelike state.

Rhythm and meter: The rhythms themselves are simple and traditional. The difficulty comes from performing different rhythms simultaneously—whistling a melody while plucking an accompaniment, or tapping one rhythm with two alternating feet while plucking occasional accompanimental notes.

⁶⁵ © by C.F. Peters, New York. Used by permission.

⁶⁶ Ozim, *Pro Musica Nova*, Huber, 36.

Adler, Samuel

Meadowmountetudes: Four studies of 20th-century techniques for Solo Violin (1988)

Composer Biography

Samuel Adler (b Mannheim, 4 March 1928), though German by birth, is considered primarily an American composer and conductor. He earned degrees from Boston University (BM 1948) and Harvard University (MA 1950), and has studied composition with Aaron Copland, Paul Fromm, Paul Hindemith, Hugo Norden, Walter Piston and Randall Thompson and conducting with Sergey Koussevitzky. Adler has held teaching posts (as professor of composition) at North Texas State University, the Eastman School of Music, and the Juilliard School.

Adler's music is known for its rhythmic vitality, contrapuntal underpinning, and asymmetrical meters. His early works are often tonal or pandiatonic, but later ones tend to use atonal or serial harmonic materials. Some later pieces also utilize improvisation, or indeterminacy, as a means of generating variety. Adler's output is prolific and contains a multitude of instrumental and vocal works.

Works with Violin

Str Qt no.3, 1953; Sonata, vn, pf, 1956; Sonata no.3, vn, pf, 1965; Str Qt no.6 (W. Whitman), Mez/Bar, str qt, 1975; Aeolus, God of the Winds, cl, vn, vc, pf, 1977; Pf Trio no.2, 1978; Str Qt no.7, 1981; Str Qt no.8, 1990

General Remarks about the Collection

The four etudes of this collection give an even distribution to technical and musical problems associated with twentieth-century music. Each presents the violinist with a combination of difficulties for the left and right hands, the ear, and the mind within

a different musical and stylistic context. The titles of the etudes are descriptive and revealing about their content and purpose: “I. Irregular meters;” “II. A waltz in fast shifting tonalities;” “III. Large skips and harmonics;” “IV. A fast and furious ‘not too tonal’ perpetual motion.” Study III differs from the rest for being an expressionist-style slow movement with obvious connections to Second Viennese School music. The rest are atonal and post-tonal, and are especially applicable to the repertory of Hindemith, Bartók and Stravinsky. The technical problems, as well as the rhythmic and harmonic language, are immediately transferable to the music of those composers, though Adler’s aesthetic seems slightly heavier and more expressive than works such as, for example, Stravinsky’s A Soldier’s Tale.

As with many of the other collections in this document, the various technical problems for the hands, the ear and the mind arise from the music, itself. Left hand difficulties include the following: large leaps (fast, No. 4; slow, No. 3); fast passagework in a twentieth-century context (No. 4); unusual intervals, melodic and harmonic (includes P5ths, P4ths, 7ths, tritones, 2nds—Nos. 1-4); harmonics, natural and artificial (No. 3); extensions, expansion and contraction (No. 3); double stops and chords (Nos. 1, 3, 4); efficiency of fingerings (No. 2). Disjunct melodic lines and irregular meters are at the core of many right hand challenges. Included in this list are: string crossings (large, No. 1; skipped string, No. 4; wrist, No. 4); variety of articulations and strokes (Nos. 1 and 4); combinations of single, double and triple stops (Nos. 1, 3, 4); sound quality (No. 3); timbre (bow placement, weight and speed, No. 3). Similarly, ear training results from the harmonic and melodic language in the music. Fast-changing tonal centers (No. 2), expressionist organization (No. 3, 12-tone and atonal), free atonality (Nos. 1 and 4), and

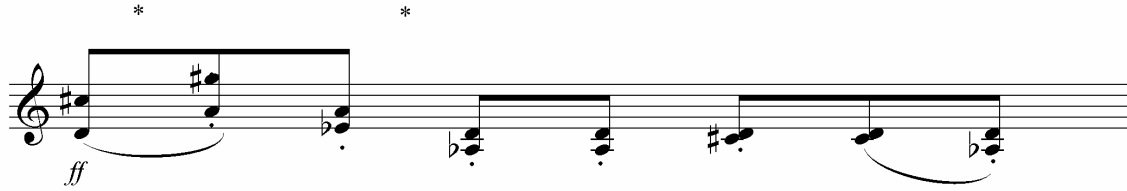
unusual intervals (P4ths, P5ths, 7ths, 2nds, tritones) are all part of the training of the ear. The mind is challenged by coordination (No. 4) and by the rhythmic and (especially) metric procedures, which include polytuplet subdivisions (No. 3), metric shifts, or hemiola, (No. 2), mixed meter with irregular meters (Nos. 1 and 4).

Meadowmountetudes is an effective and satisfying collection on several levels. Each aspect of technique is given balanced treatment but without an overwhelming quantity of disparate tasks. For example, Study II concentrates mostly on ear training and metric shifts; the player is able to focus on these particular issues without the complications of harmonic dissonance, mixed meter, and difficult technical work for the hands. In addition to being pedagogically well-designed, the studies are also highly crafted, musically and compositionally. The etudes can begin to sound good after only a small amount of practicing, and their playful, expressive, energetic character is immediately appealing to lovers of good music. Adler's collection is an excellent introduction to twentieth-century technical and stylistic study because of this combination of musical and pedagogical value. The four studies are also arranged like a large-scale traditional sonata (c. 7' in duration) and could certainly be performed this way. (Study I is fast, Study II is a waltz in 3/4 time, Study III is a slow movement, and Study IV is a virtuostic perpetual motion finale.)

Composer	Adler, Samuel
Title	Etude I: Irregular meters
Style	Free atonal
Level of difficulty	Easy
Left hand difficulty	Turning movement; intervals: 2nds, 7ths, P4ths, P5ths, tritones, 6ths
Right hand difficulty	Large string crossings; variety of articulations; mixed double and single stops
Other difficulties	
Value	Irregular and changing meter; variety of articulations; all within a playful and fairly easy technical study
Musicality	Fun with irregular meters; contrasts of dynamics and articulations
Meter	Mixed (none given) ♩ = ♩
Tempo	Quarter = 132 (“Quite fast and very rhythmic”)
Rhythmic difficulty	Simple

Style: The study uses intervals, melodic or harmonic, which are somewhat rare in the music of the nineteenth century and before, such P4ths and P5ths, tritones, 7ths and 2nds. 2nds are melodically traditional, but when written as a double stop (harmonically), they belong more to twentieth-century performance practice. 7ths, tritones and consecutive P4ths and P5ths are standard twentieth-century practice, whether they appear harmonically or melodically.

Left hand difficulty: The primary challenge in this area results from the melodic and harmonic intervals. The intervals include the following: m2nds (mm. 1-6), diminished 5ths (mm. 41-42), 6ths (m.29), 7ths (mm. 54-57) P4ths and P5ths (mm. 67-69) and melodic P4ths throughout. The melodic P4ths should be practiced as double stops to assure clarity of intonation and harmonic intent. In m. 44 the parallel 7ths and tritones necessitate the use of the turning movement of the hand from the wrist. This technique is illustrated in example 43 below.



* Turning movement of the hand

Ex. 43. Turning movement of the left hand, m. 44

Right hand difficulty: The writing contains an interesting variety of articulations and bow strokes. Refer to example 44 from mm. 37-38, shown below. The “irregular meters” cause some awkwardness of bowing. The staccato eighth notes should be played off the string in the lower half of the bow. Small, fast retakes (m.16, downbeat) and hooked bowings ([up-up] on the last two eighths of m. 18) will be necessary in order for the bowings to work.



Ex. 44. Variety of articulations, mm. 37-38

Rhythm and meter: From the title “Irregular meters” one might conclude (and correctly so) that rhythm and meter are the primary concerns in this study. The eighth note is the unit that remains constant. This etude should be practiced with a metronome—preferably one which gives a pulse as fast as ♩ = 264. The meter alternates between the following: 2/4, 3/8, 6/8, 1/4, 9/8, 5/8, 8/8, 7/8, 12/8, and 4/4. Also, the meters may be organized differently (for example, 9/8 may be grouped 3+3+3, as in m. 16, or 2+2+2+3, as in m. 11).

Composer	Adler, Samuel
Title	Etude II: A waltz in fast shifting tonalities
Style	Post-tonal
Level of difficulty	Easy
Left hand difficulty	Small shifts between positions and half positions
Right hand difficulty	Brush stroke—separate eighths off the string with length
Other difficulties	Ear training
Value	To train the ear and the hand for “fast shifting tonalities”
Musicality	Waltz character with lilt and swing
Meter	3/4
Tempo	Dotted half = 72
Rhythm	Simple; some hemiola and metric shifts

Style: The basic harmonic centricity of the study is c minor. This center appears first in a melodic fragment in mm.1-4 and recurs periodically throughout the study (mm.23-25, 55-56, and 98-102). However, the sense of c minor (as a key) is always quickly undermined by abrupt, unexpected changes of tonality. For example, this key seems to be established in mm. 54-56, but a sequential pattern suddenly takes over and moves to a distant A major harmony. Besides sequential modifications, changing accidentals point to an abstract chromaticism, which is evocative of many works by Hindemith.

Left hand difficulty: Another parallel between this study and Hindemith exists in the area of technique. Readers may wish to refer to the discussion of “technical puzzles,” located in the first study of Hindemith’s collection. The requirements here are much less strenuous than in Hindemith’s study, yet good fingering choices are crucial in both. Players should use this as an opportunity to improve on the efficiency of their fingerings. For example, with a passage like that in m.14 many inexperienced violinists will slide with the second finger from F to F# and then pull the second finger back again to play C in m.15. The F# should instead be played with the third finger, for this allows the second

finger to remain in the low position for the F and the C. In a simple passage like this, one may manage with inefficient fingerings, but in more demanding situations this way of fingering will be clumsy, slow, and ineffective.

Right hand difficulty: The right arm is responsible for the lilt of the dance as well as its dark character. (See “musicality” below.) Separate eighth notes should be played off the string, but with plenty of horizontal length (brush stroke).

Value: The title explains the purpose of the etude—to train the ear and the left hand “fast shifting tonalities.” This study would be useful preparation for many early twentieth-century works by composers such as Hindemith, Prokofiev, Shostakovich, Stravinsky and Martinů.

Musicality: The character of the piece is that of a mysterious (perhaps even slightly satirical) waltz. Rhythmic devices, like hemiola and implied changes of meter, should be playfully emphasized with vibrato and bow speed (as in mm.26-30). In mm.1-3 (and all such lyrical passages) the player can use the bow lightly and freely to draw attention to the mysterious quality of the music. Care should be taken to finish phrases with elegance. For instance, a slight pause before the third beat of m. 22 will give a sense of completion to the previous phrase; likewise, in mm.36-37 a tasteful diminuendo would be appropriate. In general, the phrases are thoughtfully constructed in a traditional manner with Romantic asymmetry. Mm.23-37 is an asymmetrical eight plus seven bars, for instance.

Composer	Adler, Samuel
Title	Etude III: Large skips and harmonics
Style	12-tone/atonal
Level of difficulty	Intermediate for rhythm and complex movements in both hands
Left hand difficulty	Harmonics; glissandi; large leaps; extensions; double stops and chords: intervals: m2nds, M7ths, P4ths and P5ths
Right hand difficulty	Bow placement; sul ponticello, sul tasto; slow and fast bow speeds; sound
Other difficulties	Ear training
Value	Very good study for sound—pure sounds vs. expressive sounds; bow placement, speed, pressure; large leaps; smooth shifts for the left hand
Musicality	Contrasts of sound, timbre and dynamic
Meter	None
Tempo	“Very slowly, but freely and expressively” (quarter = 56)
Rhythmic difficulty	Complex; triplets, quintuplets, sextuplets, septuplets

Style: Adler creates a sophisticated atonal network in this seventeen-measure piece. It begins as a 12-tone composition with row P₆ (F#, A, D, F, C#B-flat, C, E-flat, G, G#, B, E). (The printed, high harmonic D at the end of m.3 is probably an error—thus the corrected note B-natural is listed in the row.) The row is constructed from two [014589] hexachords, and may be divided further into three tetrachords—[0347], [0235], and [0347]. The Weberian row contains a great deal of built-in invariance. This manifests itself in the [01] and [03] dyads which form the larger sets [0347] and [014589]. On the surface the [03] dyad (or interval class three) reigns supreme.

Another interesting compositional “theme” which is introduced by the row (and played out through the piece) is that of symmetry. All of the sets introduced here, [0347], [0235], and [014589], are palindromic. The culmination of this procedure occurs in m.7 (beginning from the A harmonic on the “and” of beat five). The pitch classes A, B-flat, C, G, E-flat, D, B, F# form the octachord [01345689], which itself is a palindromic set and a superset of the [014589] hexachord. This idea of symmetry creates a frame or center

around a 1/4-tone lowered E to conclude the piece. In m.16, beat five, A moves down by augmented 2nd (interval class 3) to G-flat and down a semitone (interval class 1) to F. The lower contrapuntal line ascends by inversion from B-flat to D-flat to D, thus creating an axis of symmetry around a 1/4-tone lowered E (which is never reached). The same procedure creates a frame around a 1/4-tone lowered E-flat at the climax (m.10, beats four-six).

This piece is certainly unusual in style, for very rarely does a composer begin a piece with twelve-tone procedures and change to atonal ones in the middle. However, the use of free atonal material within a twelve-tone composition is common (as in Schoenberg's String Trio). Several rows within the matrix of the P_6 row are used, including: P_3 (m.4), P_{10} (m.5), I_4 (m.7), and R_6 (m.8). However, several secondary sets are also used, such as those introduced in m.9 (beginning with the G# on beat one), m.10 (beginning from the E-flat at the end of m.9), and mm.6-7 (beginning with the B-D double-stop on beat five). The last of these utilizes the atonal style in a larger sense, since it divides like P_6 into [0347], [0235], and [0347] tetrachords.

Left hand difficulty: Press fingers down firmly for clarity with artificial harmonics. Practice shifts with heavy slides and coordinated arrival with the bow for the ascending and descending glissandi (ex. mm. 6-7, 10, 13). The “large skips” of the title sometimes require large shifts, which should be practiced using a slow, smooth shifting motion (ex. mm. 3-4, 6-7, 10, 13). Double stops in m2nds (mm. 5, 9) and M7ths (mm. 6 and 10) should be played on a piano for ear training and intonation purposes. Measures 9-10 contain complex movements for left hand, including shifts, extensions, expansion and contraction of the shape of the hand, large glissandi, and intervals such as P4ths and 5ths,

m2nds and M7ths. This passage requires plenty of slow practice with concentration on the advance preparation of the various movements.

Right hand difficulty: The placement of the bow in relation to the bridge, and the speed with which the player draws it, are important in this study. Slow and fast bow speeds should be utilized for extreme contrasts of sound and expression. In m. 6, for instance, the chord at the beginning of the measure should vary bow speed from fast (frog) to slow (middle) to fast (upper half); the glissandi at the end of this same bar should be played with a light, fast speed of bow. In this latter example, the bow should be played somewhat over the fingerboard (*sul tasto*) to maintain the *pp* dynamic. In general, the placement of the bow should be varied as much as the speed in order to emphasize different timbres and qualities of sound.

Value: This piece provides an ideal context for study of sound, particularly contrast between pure and expressive ones. Bow placement, speed and pressure (weight) are crucial to the realization of timbral variety, expression, phrasing, gesture, and dynamic contrast. “Large skips” for the left and right hands provide an opportunity to work on connecting notes through slow, smooth movements.

Musicality: In a typical expressionist style, extreme contrasts of dynamic (*ppp* to *fff*), register, timbre, and character (not to mention pitch and rhythm) are employed. In addition, a contrast between pure sounds (especially with open strings and harmonics) and expressive sounds (ex. mm. 5-6), like double stops in 3rds, 10ths, 2nds and 7ths, which contain more “rub” and dissonance, should be exaggerated in this style. This allows for a certain expressive freedom as with Baroque music, in which the player uses

good taste to decide when to use warm vibrato and when to use very little vibrato to create a pure tone.

Rhythm and meter: The composer deliberately avoids showing the pulse, and one's playing should reflect this. In some cases the rhythms need only be counted precisely and played without accents (ex. mm.1-3), whereas other passages require the use of some rubato (ex. mm. 11-13). The latter is justified by the repetition in the music and the use of the word “freely” in the tempo indication for this study. The rhythm is made challenging by the use of changing meters, a wide variety of rhythmic subdivisions (including sixteenth note polytuplets), and a slow pulse. The study should obviously be practiced with a metronome set on the quarter note pulse.

Composer	Adler, Samuel
Title	Etude IV: A fast and furious “not too tonal” perpetual motion
Style	Atonal, some pitch centricity established through centering and repetition; dissonance, quartal harmonies
Level of difficulty	Advanced
Left hand difficulty	Double stops: P4ths, P5ths, 7ths; large leaps; extensions in passagework; awkward hand position settings; fingering efficiency
Right hand difficulty	Rapid wrist crossings; triple stop chords; string crossings with skips
Other difficulties	Coordination
Value	Very good study for 20th-century passagework; ear training for shifting tonal centers, chromaticism, intervals; fast challenging leaps; coordination; applicability to Hindemith, etc.
Musicality	Energetic perpetual motion character with a variety of strokes and articulations
Meter	2/4, mostly (mixed) ♩ = ♩
Tempo	“Boldly” quarter = 116
Rhythmic difficulty	Simple

Level of difficulty: Passages do not lie conveniently on the instrument in many places, and the technical work is made more difficult by the brisk tempo (quarter = 116).

Left hand difficulty: Very challenging double stops in P4ths (m. 13) are awkward and require the use of the turning movement of hand. In particular, the action of the second finger across and up makes this movement unavoidable. (The first finger should be placed in advance on G-natural in third position.) Double stops in P5ths (mm. 15-16), 7ths (mm. 25, 38-40), and chromatic 6ths (mm. 57-58) also predominate. Other problems originate from several large leaps with fast, large shifts in sixteenth notes (ex. mm. 7, 32, 41-42, 44 [sixth position], and 55-56). Changing accidentals and unusual intervals also necessitate very difficult leaps and extensions in passagework (mm. 7-9) and first and second finger adjustments (mm. 18-19). The comment about efficiency of fingering in Study II applies here, and in this case, the speed and level of difficulty make good fingerings a necessity. Imagine how much more difficult the passage in m. 27 will be if the player insists on the dogma of playing C# and C-natural on beat 2 with the same finger. Measure 27 is given below in example 45 with a better fingering possibility.



Ex. 45. Fingering efficiency, m. 27

Right hand difficulty: String crossings over four strings, and with skipped strings (ex. mm. 5-7, 9-16, 81-88) and rapid wrist crossings (mm. 88-90), are the main challenges in this area. Work for rhythmic evenness, especially coming off tied figures, during string crossings and changing articulations.

Value: This study is very good for passagework in a twentieth-century style. Awkward hand and finger positions resulting from chromaticism, shifting tonal centers, and (dissonant) intervals (melodic and harmonic 7ths, 2nds, tritones, P4ths and P5ths)

require fast, challenging movements from both hands. Effective fingerings must be chosen to simplify the work (see “left hand difficulty” in Adler’s Study II and above).

Rhythm and meter: Ties, technical challenges (leaps, crossings, extensions, etc.), articulation changes and metric shifts require that special attention be given to playing with rhythmic evenness. A good metronome can be set to a fast eighth note tempo so that the player will not have to stop or adjust the metronome for odd-numbered meters like 3/8 and 5/8.

Einem, Gottfried von

Ollapotrida: Sieben studien für Violine Solo, Op. 101 (1993)

Composer Biography

Gottfried von Einem (b Berne, 24 Jan 1918; d Austria, 12 July 1996) was an important twentieth-century musical figure in Austria. He taught composition at the Vienna Music Academy (1963-72), served on the board of directors of the Salzburg Festival and the Wiener Konzertgesellschaft, and is best known for his compositions—orchestral and chamber music, ballets, lied, and especially opera. He received some of his most important compositional training from Boris Blacher, who became a friend and librettist of several of his operas. Several times in his career, von Einem was “arrested by the Gestapo and subjected to brutal interrogation about his political activities.”⁶⁷ The Nazis also condemned his Concerto for Orchestra (1944, commissioned by Karajan) for the use of jazz-like syncopations in the last movement. The work is noted for its colorful orchestration, which is modeled after Stravinskian neo-Classicism

Von Einem is best known for his stage works. The early ballets Prinzessin Turandot, Rondo von goldenen Kalb and Medusa were popular in German opera houses and critically praised for their rhythmic energy and brilliant orchestration. His first opera, *Dantons Tod* (1947), is based on Georg Büchner’s play about revolutionary France. The work was immediately successful for many reasons, not least of which concerns its historical post-WWII context and its exploration of the recently committed Nazi atrocities. A variety of influences, including Strauss, Stravinsky, Weill and Blacher, are

⁶⁷ Erik Levi, “Gottfried von Einem,” Grove Music Online ed. L. Macy (accessed 2 February, 2004), <http://libezp.lib.lsu.edu:2130>.

assimilated into a style that also contains enough rhythmic interest and harmonic simplicity to express the large emotional range of the text.

Von Einem's reputation was damaged by his opera Jesu Hochzeit (1980)—a work which caused a scandal in Vienna and was condemned by the Catholic Church. The opera contained an erotic encounter between Jesus and a female Death and represented Mary Magdalene as a pop singer. Much of his last twenty years was devoted to chamber music, which shows the influence of the Viennese tradition, especially Bruckner, Mahler, and early Schoenberg. Here von Einem composes in a more austere contrapuntal manner, exercising a tight formal control over his thematic material and moving freely from passages of strongly defined tonality to those with a high level of dissonance.

Works with Violin

Serenade, op.10, double str orch, 1949; Vn Conc., op.33, 1967; Slowakische Suite, op.107, str, 1995; Sonata, op.11, vn, pf, 1949; Reifliches Divertimento, op.35a, vn, va, hn, pf, 1972; Str Qt no.1, op.45, 1975 [variations on a theme from the 3rd scene of *Der Besuch der alten Dame*]; Str Qt no.2, op.51, 1977; Str Qt no.3, op.56, 1980; vn, vc, 1981 [variations on a theme from Mozart's *Don Giovanni*]; Str Qt no.4, op.63, 1981; Str Trio, op.74, 1984; Qt, op.85, fl, vn, va, vc, 1988; Str Qt no.5 'Festina lente', op.87, 1989–91; Verdehr-Trio, op.97, cl, vn, pf, 1992; Str Trio, 1996, frag.; Sonata, op.47, vn, 1975–6; Ollapotrida, 7 studies, op.101, vn, 1993

General Remarks about the Collection

Rhythm and meter are the primary focus of Ollapotrida, and, in particular, procedures that are associated with jazz and jazz-influenced music and the use of changing and irregular meters in twentieth-century repertoire. Von Einem's collection is

the only one to address this issue in such a thorough and specific way. Studies 4-7, in particular, are rhythmically playful and musically easy-going, as befits music influenced by popular idioms like jazz and zydeco. The following rhythmic and metric devices appear in the studies: metric reorganization (Nos. 4 and 5); metric shifts, or hemiola (Nos. 5 and 6); complex mixed meter relationships (Nos. 5, 6, 7); syncopation (Nos. 4, 6, 7); jazz-feeling (Nos. 4, 6, 7); polytuplets (No. 3).

Other aspects of training for the ear and the hands appear in the collection, but in a less intensive or systematic way. The right hand is challenged as a byproduct of the complexities of rhythm and meter. Studies 5, 7, and particularly, No. 6 contain a variety of strokes, articulations and dynamics. Study No. 7 is the most difficult for the right hand in terms of string crossings and coordination. Again, these issues arise from the music itself, since the melody leaps unexpectedly from one register to another.

The most effective studies for the training of the left hand are Nos. 3, 5 and 7. No. 3 contains a pizzicato passage with awkward P5ths and even some double P5ths. The ending of this study is also challenging for both hands and for coordination between them. Study No. 5 is very effective for practice with preparations and the turning movement of the hand (used while playing P5ths and for crossing strings with the left hand). Study No. 7 presents the violinist with a good opportunity for practice in second position and the small shifts between first and second positions. Ear training work is fairly conservative (as a result of the tonal language of the studies) and involves mostly the fast-changing tonalities of Nos. 5 and 7. Studies 1-2 could be skipped unless the work is being performed, since the compositional and performance styles are traditional.

Composer	Einem, Gottfried von
Title	1.
Style	Post-Modern; Tonal, D major
Level of difficulty	Easy, 1st – 3rd position
Left hand difficulty	
Right hand difficulty	
Other difficulties	
Value	A simple piece with some harmonic dissonance and dotted rhythms
Musicality	Simple Quakerian style
Meter	3/4
Tempo	Quarter = 88; Mäßig langsam (moderately slow)
Rhythmic difficulty	Simple

Style: The study uses a simple folk music style of melody, harmony and rhythm. A prominent dotted eighth/sixteenth rhythm, limited harmonic dissonance (mm. 2-3), and a small range of expression and dynamics (*p* to *f*) are additional features of this piece.

Composer	Einem, Gottfried von
Title	II
Style	Post-Modern; Tonal, C major, simple diatonic harmony
Level of difficulty	Easy, 1st – 3rd position
Left hand difficulty	
Right hand difficulty	Play staccato ♪’s in lower half of the bow, with hooked bowings
Other difficulties	
Value	
Musicality	Lyrical, expressive character
Meter	4/4
Tempo	Quarter = 72; Langsam (slow)
Rhythmic difficulty	Simple

Value: This study could easily be skipped unless performing the studies, since it employs a traditional style of play.

Composer	Einem, Gottfried von
Title	III
Style	Post-Modern; Tonal, b minor
Level of difficulty	Intermediate
Left hand difficulty	Intervals: P5ths, some double
Right hand difficulty	Dotted passage in m. 37
Other difficulties	
Value	Left hand passagework and P5th settings in pizz.
Musicality	Slow, dramatic, defiant character; Classically symmetrical phrasing (ex. mm.1-8 consists of two 4-bar phrases)
Meter	4/4
Tempo	Quarter = 63; Schwer
Rhythmic difficulty	Medium, sextuplets and dotted rhythms

Style: The tonality becomes progressively more complex in each study of this collection. The chromatic line from G to D over pedal scale degree 1 (B-natural) in mm. 1-2 is early evidence of this trend. The g minor tonality dominates, though the B-section (mm. 17-33) is developmental, and seems to fluctuate more between d minor and a minor. The note G itself is emphasized through centering by F# and A-flat in mm. 3-5 and 14-16.

Level of difficulty: The A-sections are easy and can be played within the first through fourth positions. The B-section pizzicato passage is what elevates the etude to an intermediate level, solely because of the complexity of setting the left hand for the chords.

Left hand difficulty: The setting of the pizzicato chords in the B-section (mm. 17-33) is problematic due to the intervals used. Non-violinist composers often mistakenly believe that because the strings are tuned in perfect fifths, it follows that playing perfect fifths is simple. Any violinist will tell you that this misconception often leads to unpleasant, awkward writing, which is difficult to play in tune and with a good sound. One finger must be placed precariously between two strings, often unable to depress

either string fully or evenly. The passage in question actually has perfect fifths across three strings, making it necessary to place the second finger side by side with the first, but on the top string. Example 46 below illustrates this fingering possibility.

Guitarists and possibly cellists would “bar” the first finger across all three strings, but this technique has not been adopted by violinists (and for good reason). Whatever the culprit—the arc of the bridge and strings, or the angle of the player’s wrist—the barring of the top note (B-natural in this example), will usually produce an unclear sound which is also out of tune. (As with all things of this nature, variables such as the size of a player’s fingers and the distance between the strings on a given instrument may make the other option preferable.) A better alternative, the use of the second finger is nevertheless awkward and uncomfortable to set. Whichever technique is mastered will prove useful in a great deal of twentieth-century literature by Ravel, Stravinsky, Prokofiev, and many others. The A-flat harmonic in m.31 should be played as an artificial harmonic on the G-string; place the first finger firmly on A-flat while the fourth finger plays the harmonic.



Ex. 46. Fingering possibility for double perfect fifths, m. 25

Right hand difficulty: The dotted passage in m. 37, beats 2-3 will be easier for most players to play as it comes (rather than hooked) starting up-bow in the upper half.

Rhythm and meter: The (final) A'-section (mm. 34-41) uses a variety of rhythmic subdivisions and polytuplets in combination with more challenging left hand passagework. This section should be practiced with a metronome for rhythmic evenness.

Composer	Einem, Gottfried von
Title	IV: “400 Bourbon Street”
Style	Post-Modern; Tonal, c minor; Von Einem indicates that this study was inspired by “400 Bourbon Street” by Gerald Schwertberger’s “Die Synkopenfiedel” (the syncopated violin)
Level of difficulty	Intermediate
Left hand difficulty	
Right hand difficulty	Large string crossings with skipped strings (mm. 21-24)
Other difficulties	
Value	Work with rhythm and meter
Musicality	“Moody” c minor dance with a playful sense of rhythm
Meter	2/2, metric reorganization (changing 2+2+2+2 to 2+3+3, 3+3+2, etc.) in mm. 3-4, 8-9, 16-17, and 31
Tempo	Half note = 84; Moody
Rhythmic difficulty	Medium (syncopation, mm. 6-7)

Level of difficulty: This etude is fairly easy in terms of left hand technique (first-third/fourth position), but the right hand is complicated by the rhythmic challenges, the variety of articulations and occasional large string crossing leaps, (mm. 12-13, 16-17, 21-22, 31).

Value: The purpose of the etude is to improve one’s mastery of syncopation and metric reorganization. The work in this area will be useful preparation for many twentieth-century works, especially those bearing the influence of the rhythmic vitality of jazz. Ravel, Milhaud, Stravinsky, Copeland, Gershwin, and Bernstein are just a few of the composers who wrote jazz-influenced music. String crossings with skipped strings are also worthy of technical attention. Incidentally, the chords in m. 35 contain an error—the composer most likely did not keep the key signature in mind. The two middle chords are not playable unless they are broken or re-voiced, since two notes—G and A-flat, then F and A-flat—must be played on the D-string. (One option would be to play the notes in the middle voice—G and F—up an octave.)

Musicality: Von Einem uses American music influences, the jazz and zydeco idioms one would expect to hear on “400 Bourbon Street” (New Orleans, Louisiana), to construct an energetic, dance-like movement. He plays with meter from the outset, and the performer should bring out these implied changes as much as possible. For example, in mm. 1-2 eighths one, four, and seven should be stressed, creating a 3+3+2 feeling. The phrasing is dance-like too, with short, rhythmic fragments taking the place of lyricism.

Composer	Einem, Gottfried von
Title	V
Style	Post-Modern; Tonal, C major, but more ambiguous with fast-changing tonality
Level of difficulty	Intermediate
Left hand difficulty	Horizontal finger movements; preparations; octaves
Right hand difficulty	Changing articulations, strokes and dynamics
Other difficulties	Mental; rhythmic groupings and metric organization change frequently; odd groupings cause awkwardness for counting, bowing and coordination
Value	Changing rhythmic groupings in 10/8 meter; preparations; horizontal finger movements
Musicality	Use bow speed and vibrato to energize the character, the dynamics and to bring out gestures and various metric groupings.
Meter	10/8 with metric reorganization and metric shifts
Tempo	Quarter = 192; Schnell (fast)
Rhythmic difficulty	Medium; motoric ♩’s

Style: The sense of key is more ambiguous than in the previous studies. From the pick-up to m. 3 the tonality is in question. The dominant, G major, is tonicized and centered by F# and A-flat (mm. 3-6) before C major has been clearly established. Mixture contributes to this ambiguity in m. 7 with the f minor (minor iv in C major) collection. Additionally, fast-changing tonality similar to Hindemith, Stravinsky, Prokofiev, and Shostakovich characterizes mm. 13-21. The final four bars (mm. 22-25) end not with a

conclusive C major, but rather the C pentatonic (C-D-E-G-A)—the ultimate ambiguity since several different keys can be implied by this collection without semitones.

Level of difficulty: The difficulty is as much mental as technical, though both are affected by the brisk tempo (quarter = 192). Many problems also stem from the irregular meter (10/8) used throughout with various rhythmic groupings and changes of metric organization. Odd-number groupings (5+5) in the 10/8 are tricky for bowing and coordination, but are made more confusing when coupled with even-numbered repetitions of notes. For example, C is repeated on the G-string eight times in m. 1, and this pattern continues with B in m. 2, G in m. 3, and A-flat in m. 4.

Left hand difficulty: The opening is slightly easier in second position until the pick-up to m. 3. Additionally, the final chord of the study should be prepared by shifting back to first position in the second half of m. 24. Shifts to the setting of melodic octaves (mm. 1-6) should be practiced in double stops with a metronome. Preparations may be addressed in the same way. For instance, observe the practice sequence in mm. 1-2 (played in second position): play the pick-up to m. 1; reverse the first and second finger positions, placing the second finger touching the D- and G-strings; play the downbeat of m. 1 and hold a long C on the G-string; begin to slide the second finger horizontally across to the D on the A-string while simultaneously lifting the fourth finger over B on the D-string to prepare for the downbeat of m. 2; (do not turn the hand too far—stay close to the D-string); keep this preparation while playing the last two eighths of m. 1; slide the first finger across to the G-string and up a 1/2 step; set the octave; play the downbeat of m. 2. This sequence should then be practiced with the metronome in a slow tempo and long, connected bowing. Gradually increase the tempo without altering the movements.

This passage is not extremely challenging, and, therefore, the tempo may increase rapidly with ease if the slow practicing is focused. Nevertheless, this way of thinking and practicing will serve the player well in all styles and genres of music.

Rhythm and meter: Metric reorganization and shifts occur with great frequency.

The 10/8 meter is organized in the following ways: 5+3+2 (mm. 1-4); 5+5 (mm. 4-6, 11, 16, 22-23); 2+2+2+2+2 (mm. 7, 17); the palindromic 2+3+3+2 (m. 8); 1+2+2+1+2+2 (mm. 12-15) and 3+3+3+1 (mm. 18-19). An example of metric shift is illustrated by mm. 20-21, during which two 10/8 bars are combined into one large 20/8 bar (4+4+4+4+4).

Composer	Einem, Gottfried von
Title	VI
Style	Post-Modern; Tonal- G major
Level of difficulty	Easy, 1st -3rd position; rhythmic work
Left hand difficulty	
Right hand difficulty	Variety of articulations and dynamics, with offbeats, syncopations
Other difficulties	Mental; rhythm, coordination
Value	Like Studies IV and V, good introduction to metric shifting and syncopation and the technical problems which are byproducts
Musicality	Classical symmetrical phrasing; contrasts between rhythmic and lyrical characters, short, long and accented articulations, and various dynamics and phrase shapes
Meter	Mixed, 2/2, 6/4, 2/2
Tempo	Half note = 92; Bewegt (agitated, excited)
Rhythmic difficulty	Medium; syncopation, offbeats

Style: Study VI uses straightforward diatonicism, with typical modulations to the dominant D major (mm. 10-23) and a tonicization of E major (mm. 24-29). While the B-section (mm. 10 -30) is developmental and lyrical, the A- (mm. 1-9) and A'-sections (mm. 31-45) are more rhythmic, and fragmented. The A-sections are Beethovenian in the sense that they contain lots of offbeats and syncopation, which are rhythmic and energetic without being dance-like. By contrast, the B-section is a very danceable waltz in 6/4, rather than the traditional 3/4.

Right hand difficulty: This study should be approached with care to the possibilities of strokes and articulations. Eighth note offbeats should be lifted (starting from the string) and staccato eighths should be bounced (off the string stroke). Practice these strokes in different parts of the bow (middle, upper middle, lower middle, etc.) to maximize the benefit and accumulation of right hand control.

Composer	Einem, Gottfried von
Title	VII “Five-Four-Twelve”
Style	Post-Modern; Tonal, E flat major
Level of difficulty	Intermediate
Left hand difficulty	Many shifts between 1st, 2nd pos.
Right hand difficulty	String crossings and coordination; skips over strings, mm. 13, 38
Value	Mixed meter; syncopation; right hand crossings and coordination
Musicality	Swinging, playfully rhythmic
Meter	Mixed; 5/4, 5/8 alternating; ♩ = ♩
Tempo	Quarter = 152; Rasch (rapid, speedy)
Rhythmic difficulty	Medium; syncopation

Style: Again, the tonality is clear in Study VII, with a modulation to the dominant B-flat major in the B-section (mm. 15-29). The very opening is unusual for the immediate change from the tonic E-flat to D-flat (flat VII) in mm. 1-2. Another interesting feature that first appears in mm. 9-14 involves the use of register changes in the middle of a melodic line.

Left hand difficulty: The player should take advantage of the second position in this study, as it greatly simplifies many technical issues. For instance, unnecessary string crossings and timbre changes are avoided by playing in second position in mm. 16-20 (shift after the open D), 22-25 (shift after the open A) 29-35 (shift on the octave B-flats), and so on.

Right hand difficulty: The string crossings in the right arm provide the most significant challenge in this study. Mm. 25-30 illustrate this well, since they contain

many examples where string crossings occur in rapid combination. Most of the slurred figures here are with crossings which are succeeded immediately (or almost immediately) by crossing back to the previous string (from A-string to E-string back to A-string in mm.25-6, for instance). Such places require a flexible movement of the right hand from the wrist (or, for some players, small, well-prepared arm movements). Some string crossings must traverse silently over skipped strings due to the registral leaps. Care should be taken not to touch the skipped strings. Thus, the previous note should be stopped, and the bow slightly lifted and moved to the new string.

Musicality: The 5/8 passages have the character of an off-balance (drunker than usual) Irish reel, and should be played in an easy melodic style. By contrast, the 5/4 bars are more rhythmically energetic, and should be played with fast vibrato on—and a slight space after—each quarter.

CONCLUSION

One might ask why a canon of twentieth century violin etudes is not at the disposal of today's violinist. A variety of simple answers offers some satisfaction to the query. One is that the composers/pedagogues have not written them. Many technical and musical issues, styles (electronic music, for example), and extended techniques (such as subharmonics) are not covered by the existing body of twentieth-century studies (at least not the ones that I have thus far discovered, for certainly more do exist). However, this leads logically to another question about why these gaps have gone unfilled. To understand this, one must consider the stylistic diversity of the twentieth century.

Once the "dissonance was liberated" (to paraphrase Schoenberg) composers sought an alternative to tonality—a way of organizing these sounds into a new system. Schoenberg, Stravinsky, Bartók and others had different solutions to this problem, each with followers developing from these various trends and others who intentionally resisted existing trends in favor of breaking new ground. The result of this divergence is stylistic pluralism. This diversity, to some extent, explains why certain styles and techniques have not been covered by the existing body of studies.

One might also be tempted to place some blame on the violin pedagogues, who prescribe specific studies for eighteenth- and nineteenth-century repertoire, but not for twentieth-century repertoire. Several things, however, should be kept in mind. Until now, little has been known regarding this body of work (twentieth-century violin etudes). Additionally, the personal experience of the pedagogues, especially those of an older generation, must be taken into account. Lastly, and perhaps most importantly, the lack of widespread acceptance of twentieth-century music is an important determining factor.

With regard to the experience of the pedagogues, people generally teach as they were taught. A violinist studying in the 1960's or '70's would not likely have been given etudes by Rochberg from 1970 (Caprice Variations for Solo Violin) to learn by a pedagogue of the previous generation. In another way, we lack historical perspective—we are too close to the twentieth century to fully understand its major trends and the connections between them.

As to the lack of widespread acceptance, the reasons are many. For one thing, popular music (jazz, rock, etc.) replaced “classical” music as the music of the masses in the twentieth century. Classical music became art music for the elite, the wealthy and the well educated. In addition, the elimination of the tonal system, and in many cases steady pulse, took away the two most fundamental aspects of the listener's security and enjoyment—that is, the ability to hum a tune and tap one's foot to the beat. This created distance between composers, performers, and audience as never before (a trend paralleled in the literature of T.S. Eliot, and the visual art of Picasso and many others). For this reason, twentieth-century music is still difficult to program—many audience members pay to hear the “classics” by masters such as Mozart and Beethoven. Modern music is often rejected by audiences, and then in turn by concert sponsors and boards of directors. This lack of acceptance even prevails, in some cases, among the musicians, who dislike and resist the requirements of twentieth-century music. Nevertheless, the professional violinist of this and future generations will have to contend with these requirements (hopefully, with greater frequency and with acceptance from fellow musicians and audiences alike). With this in mind, the following paper is created for violinists of various ages, backgrounds and abilities, for teachers, and for anyone interested in the music of

the composers represented in the hope that the extraordinary and diverse literature of the past century can be better understood, mastered, and enjoyed.

Violinists and musicians in general have long debated the usefulness of practicing etudes, scales, and exercises. However, most musicians (especially non-prodigies) would agree that working on studies is useful for several reasons. In the aforementioned preface to Hindemith's Übungen für Geiger, he says, "In condensed form he [the violinist] is offered much that may facilitate his performance of modern solo, chamber music and orchestral parts."⁶⁸ This concept is central for many studies, which focus attention on one, or a few, challenges. For example, in Hindemith's Study no. 1, the crawling technique is the primary focus and is presented in a monophonic texture. Throughout the study, the technique is reinforced through repetition and transposition with various finger combinations in ascending and descending patterns. Later, in Study no. 5, the same technique is taught in a more complex homophonic (double stop) setting.

Hindemith's studies, and those of Ysaÿe, are conceived of in mostly pedagogical terms as systematic studies of specific technical problems. Throughout this document, a distinction has been made between dry technical studies and musical ones. As previously discussed in the introduction, the dry studies are effective because they allow the player to stay intellectually and emotionally calm while concentrating on a particular task. However, the player who prefers more musically inspiring contexts will find many throughout this document. In fact, most of the etudes presented here seem to be at least as concerned with the musical and compositional aspects of the pieces as the pedagogical and technical ones. Only a handful of studies, such as those by Adler and Constantinides, achieve a true balance between the two.

⁶⁸ Hindemith, 3.

The stylistic pluralism of the twentieth century creates another interesting dilemma with regard to etudes: given the quantity and variety of trends, one may wonder about the practical value of trying to prepare for everything. Even a single piece like Crumb's Black Angels requires so many different techniques that, to a certain extent, the performers must face issues in the music itself. (What would be the practical value of writing an etude for bowing on crystal glasses and another for chanting in Swahili, and so on?) However, certain techniques which are problematic, such as the glissandi in part I, extended techniques (like crushed tone, col legno tratto, pizz gliss, wild vibrato, etc.), playing the instrument in unconventional ways for new timbres, and multi-tasking in general, can be learned ahead of time. Such work will save time and prevent frustration. Thus, students and teachers can choose studies that are applicable to upcoming solo, chamber and orchestral repertoire. Non-specific studies can also be chosen if they cover general aspects of twentieth-century literature, including dissonant (melodic and harmonic) intervals, mixed meter, fast-changing tonalities (harmonies), and so forth.

Etudes are important in all styles because they provide a context away from the distractions of musical details and emotions; in twentieth-century music, the problem is even more amplified because the techniques and language are unfamiliar. The tendency when working out problems in the performance literature is to brush over the issue enough to survive a particular passage or movement. Etudes give violinists the luxuries of time, focus and systematic progression.

During a recent experience with Greek composer Panagiotis Liaropoulos' Lament for String Quartet and Tape (unpublished, 1999), some of the players felt uncomfortable with the microtonality (direct modifications and bending of pitches) in the melodic

language. One player remarked that even after practicing the technique, s/he never felt truly comfortable aurally or technically. Limited rehearsal and practice time, the added complexity of ornaments, glissandi and improvisatory rhythms (the solos are essentially transcriptions of Greek folk musicians), and the difficulty of including emotion in a folk style all contributed to the player's discomfort and confusion. My own experience with the etudes of Terzakis, Denisov, and others, containing microtonality, gave me a decided advantage in this case, and as a result, I felt freer in the performance to explore the improvisatory and expressive aspects of the music.

Performers who attempt to learn such techniques while learning literature for performance tend to skim the surface of the work just enough to make an immediate performance application. Thus, the player feels less comfortable in performance, executes the technique(s) below his/her level of ability, and fails to learn the technique with any depth and understanding. With regard to this last point, loss of time and a feeling of frustration will continue if the player encounters the technique in the literature again and achieves the same result.

Simple extended instrumental techniques, such as ponticello and col legno battuto, should also be practiced thoroughly in the context of an etude. Such techniques appear with great frequency in twentieth-century music, but unfortunately, performers often dismiss them as unimportant effects. Many players take these types of technical details for granted and fail to realize a composer's full intent. A technique like ponticello can change the mood, character, and timbre of the music and thus have a powerful transformative effect on a listener. Many artists who specialize in twentieth-century music (like the Kronos Quartet) illustrate this point through their performances. The

Contemporary Violin: Extended Performance Techniques contains ten musical examples showing different varieties of ponticello.⁶⁹

Some of these varieties include the following: ponticello “on” the bridge, not merely “near” it (in Schoenberg’s String Trio, 1950, for violin, viola, and cello); differentiations between near the bridge and on it, in String Quartet by Michael von Biel; transient sul ponticello (ord. → pont. with various dynamic changes) in Wayne Peterson’s Clusters and Fragments (1968) for string orchestra; sul ponticello with vibrato and sul ponticello with mute and trills examples in Miniatures (1959) for violin and piano by Krzysztof Penderecki; sul ponticello with → without → with the fundamental tone in György Ligeti’s Ramifications (1968-69) for string orchestra.⁷⁰ When the composer is not so specific about the precise intent of such extended techniques, the performer(s) must choose from among the full range of possibilities. For example, col legno battuto, like ponticello, has many varieties, and the players are usually responsible for making a well-informed decision about whether to produce a percussive effect with the wood alone or to use some hair (on the side) to produce some pitched noise as well. Therefore, the violinist must be aware of the full range of possibilities, and be able to reproduce them quickly and masterfully. Practicing and perfecting these techniques in etudes like Lehmann’s Arco and Constantinides’ Study no. 32 “Design II—Antiviolin” will benefit players greatly and prepare them technically for the requirements of twentieth-century music.

In the preface to Dix Preludes Ysaÿe writes, “At all times harmonic discoveries have helped to develop instrumental technical progress, and particularly that of stringed instruments. In fact, every new chord—or those which took a long time to come into

⁶⁹ Strange, Patricia and Allen Strange, The Contemporary Violin: Extended Performance Techniques (Berkeley, California: University of California Press, 2001), 3-6.

⁷⁰ Strange and Strange, 3-6.

practical use—brought to the technique richness, scope, an element of invention, a new interest and every realm of music benefits from this contribution.”⁷¹ This statement was made circa 1928, and since that time, composers have introduced more than a few new chords. Constantinides spoke of his final study “Grand Finale—Return to Music” as abandoning the rigor of any particular style or strict method of composition in favor of a pluralism in which elements of tonality, post-tonality, atonality, serialism, modernism, and post-modernism, as well as jazz, popular music, world and folk music, and electronic music are all equally useable and inter-relatable.⁷² Music, like the world, has changed more in the last one hundred years than in any previous century, and so too have the technical, sonic, and stylistic possibilities of the violin. Given the state of Western “classical” music today, the violinist will be forced to look beyond the limited scope of the familiar eighteenth- and nineteenth-century repertoire more and more. With all of this in mind, it seems only natural for the violinist to apply the same energetic search for perfection, inventiveness and artistry to the newest century’s literature as to that of the past.

⁷¹ Eugene Ysaÿe, Dix Preludes for violin, op. 35, Preface (Brussels: Schott, 1952), 5.

⁷² Constantinides, 2004.

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APPENDIX A

SYNTHETIC COLLECTIONS

C octatonic



C# octatonic



Db octatonic



C pentatonic



C whole tone



C# whole tone



The image displays six musical staves, each representing a different synthetic collection. Each staff begins with a treble clef and a key signature symbol. The notes are written as half notes. The first staff is for the C octatonic scale, starting on C4 and ending on C5. The second staff is for the C# octatonic scale, starting on C#4 and ending on C#5. The third staff is for the Db octatonic scale, starting on Db4 and ending on Db5. The fourth staff is for the C pentatonic scale, starting on C4 and ending on C5. The fifth staff is for the C whole tone scale, starting on C4 and ending on C5. The sixth staff is for the C# whole tone scale, starting on C#4 and ending on C#5.

APPENDIX B

LIST OF PUBLISHERS AND WEBSITES

Adler, Samuel: Meadowmountetudes.

Theodore Presser Co. – www.presser.com

Bartolozzi, Bruno: Due Studi per Violino.

Aldo Bruzzichelli – members.aol.com/margunmus

167 Dudley Road

Newton Centre, MA 02159

(617) 332-6398

Cage, John: Freeman Etudes.

Henmar Press, Inc. – www.edition-peters.com

Constantinides, Dinos: Twentieth-century Studies for two violins.

Magni Publications – www.magnipublications.com

Einem, Gottfried von: Ollapotrida: Sieben Studien für Violine solo.

Ludwig Doblinger – www.doblinger-musikverlag.at

Henze, Hans Werner: Étude philharmonique für Violine Solo.

Schott's Söhne – www.schott-music.com

Hindemith, Paul: Übungen für Geiger.

Schott ED 4687 – www.schott-music.com

Kim, Earl: 12 Caprices for Solo Violin.

Palindrome Press – www.presser.com

Ozim, Igor: Pro Musica Nova: Studien zum Spielen Neuer Musik für Violine.

Breitkopf and Härtel – www.breitkopf.com

Rochberg, George: Caprice Variations for Unaccompanied Violin.

Galaxy Music Corporation (Catalog No. 1.2501) – www.ecspub.com

Ysaÿe, Eugène. Dix Preludes, op. 35, pour Violon Solo.

Schott frères (S. F. 8905) – www.eamdc.com

APPENDIX C


LETTERS OF PERMISSION FROM PUBLISHERS

To whom it may concern,

My name is Aaron Farrell and I am a doctoral student at Louisiana State University. I am writing in order to obtain permission to reprint short excerpts from Igor Ozim's Pro Musica Nova: Studies for Playing Contemporary Music (EB 8356) in my doctoral monograph (dissertation). The excerpts would not exceed two lines in length. Thank you for your consideration of this matter.

Sincerely,
Aaron Farrell

From :	gabel <gabel@breitkopf.de>
Sent :	Friday, April 16, 2004 5:13 AM
To :	<boviolin@hotmail.com>
Subject :	Edition 8356 - Your dissertation



Att. Aaron Farrell

In response to your request we inform you as follows:

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To whom it may concern,

My name is Aaron Farrell, and I am a doctoral student at Louisiana State University. I am writing in order to obtain permission to reprint a brief excerpt from George Crumb's Black Angels (Images 1) for electric string quartet. The excerpt is from part 7 and is less than one line in length. It would be used in my doctoral dissertation. I can be reached at the following e-mail address:

boviolin@hotmail.com. Thank you for your consideration on this matter.

Sincerely,

Aaron Farrell

From : Gene Caprioglio <gene@cfpeters-ny.com>
Reply-To : <gene@cfpeters-ny.com>
Sent : Friday, April 23, 2004 8:38 AM
To : <boviolin@hotmail.com>
Subject : RE: permission request



<![endif]-->

Aaron,

Yes, you may use the excerpt in question. I am forwarding this e-mail to my assistant, Hector Colon, who will send you formal permission.

Gene

C.F.PETERS CORPORATION
Gene Caprioglio
Director - Rights Clearance Division

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