

PAUL HINDEMITH'S IDIOMATIC WRITING FOR VIOLA
AND ITS INFLUENCE ON HIS THEORIES.
SONATA FOR VIOLA SOLO OP. 11, NO. 5.

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INTRODUCTION

Paul Hindemith (1895-1963) was one of the most distinguished composers of the twentieth century. His compositional style is characterized by complex forms, refined contrapuntal writing, and elaborate harmonic language. Hindemith's compositions for the viola are indispensable to the viola repertoire today. They represent music written for viola with a great knowledge of the instrument and its possibilities. My interest in Hindemith developed several years ago after I performed his music and examined Hindemith's career as a viola player. After choosing his Sonata op.11 no.5 for my final doctoral lecture recital, and initial analysis of that piece, I have realized an important connection between his early instrumental pieces and the creation of his compositional theory.

This document is organized into three chapters. The first chapter describes Hindemith's experience as a soloist and chamber musician. His performance career is very important for understanding his music. His experience as a chamber and solo musician gave him opportunities to perform his own music as soon as it was written and to play the music of his contemporaries. It let him generate and illustrate his ideas with a direct connection between compositional and performing processes. The second chapter focuses on Sonata op.11 no.5. It examines the tradition and history of the solo sonata genre, describes the influences of Hindemith's early music, provides structural analysis, and describes how Hindemith's musical material is often determined by the natural possibilities of the instrument. The fourth chapter shows how Hindemith's compositional theories were rooted in his performance background. This project will conclude with a lecture recital including a performance of Sonata op.11 no.5.

I. HINDEMITH'S PERFORMANCE CAREER:

1. Successful violinist, early stage of Hindemith as a violist

Hindemith as a violist had solo appearances around the world. For many years he was a violist in the famous Amar-Hindemith Quartet. His viola concertos and sonatas represent compositions that are challenging, and characterize Hindemith as a high level performer, both musically and technically. Like many violists, Hindemith started on the violin. He was raised in a family where music was greatly appreciated. His father Robert Rudolph Hindemith played the zither and all three of his children took music lessons from their early childhood. With his sister Toni as a violinist, brother Rudolph as a cellist, and their father, who accompanied them on a zither, Paul played the violin in the Frankfurter Kindertrio, giving performances in Naumburg, where his family was living at this time. Young Paul took lessons in violin from Eugen Reinhardt starting in 1904. Later, in 1906 or 1907, he studied with Anna Hegner in Frankfurt. Hegner introduced Paul to his next teacher and future colleague in a quartet, Adolf Rebner. After a year of private lessons with Rebner and completing his basic education in 1908, Hindemith became Rebner's student at the Frankfurt Conservatorium (Hoch's Conservatorium).²

During his studies with Rebner, Hindemith showed remarkable success as a violinist. His repertoire included concertos by Mendelssohn, Mozart, Beethoven, and Brahms. From 1913 he started to work professionally in orchestras, and played second violin in the Rebner String Quartet. Hindemith received a violin as a prize for the 1915 competition from Joseph Joachim Foundation. In June 1915, he earned a position in the Frankfurt Opera as a first violinist. One year later he became concertmaster of the orchestra. His performing abilities were notable -- in his letter to the Weber family in 1916 he wrote:

² Geoffrey Skelton, *Paul Hindemith: the man behind the music: a biography* (London: Gollancz, 1975), 29-34.

One of the concerts in Pforzheim was a big solo concert, in which I loosed off the Mendelsohn concerto and the Chaconne... In March I passed my audition at the theater and am now permanently engaged as first concertmaster. In the audition, they made things very difficult for me. ... Completely unprepared, I played for the director and two conductors the 1st movement of both the Brahms and the Beethoven concertos, the complete Mendelssohn concerto, and the Chaconne... Everything went well; Mengelberg... however, absolutely did not want to grant me the position because I was much too young, but I heard that he already had another violinist up his sleeve. However, when I had to play extremely difficult passages from *Salome* (that I had never seen before) and sight-read them smoothly, he could no longer make any objections.³

After military service, which he served from August 1917 to early 1919, Hindemith continued his work with the Frankfurt Opera as a concertmaster and in the Rebner Quartet as a violist. He decided to switch to the viola, although his reasons for doing so remain unclear. He mentioned that in the army he played viola in a quartet and he loved the sound of that instrument.⁴

This was a time when the viola started to gain more attention and Hindemith was not the only one to change to the viola when he had successful career as a violinist (for example: William Primrose). Hindemith's abilities as a violinist, however, obviously characterize him as an accomplished musician and it would be logical to conclude that he was equally proficient on the viola.⁵

³ Paul Hindemith and Geoffrey Skelton, *Selected letters of Paul Hindemith* (New Haven: Yale University Press, 1995), 10-11.

⁴ *Ibid.*, 19.

⁵ During these years his style started to gain individual characteristics, especially evident in string quartet no.2 op.10 and sonatas op.11. The first concert of Hindemith's music was given on June 2, 1919, in Saalbau (Frankfurt), where the composer played both the violin and the viola in a concert featuring his String Quartet no.1, early Piano Quintet, Sonata for viola and piano op.11 no.4, and Sonata for violin and piano op.11 no.1.

2. Amar-Hindemith Quartet, and a peak of a performance career

One of the most important events in Hindemith's life was the first Donaueschingen music festival in 1921, where the Amar-Hindemith Quartet was created and later became a valuable part of Hindemith's performing career. At Donaueschingen the Amar Quartet gained popularity through playing modern chamber music and it became a welcome chamber group at other festivals. Edwin Evans mentions their appearance in Salzburg in 1923:

... not only is the Quartet a remarkably fine one, but its enterprise is an example to all. This year, for instance, it claims to have studied no fewer than forty new works, and I can vouch that when it says "studied," it does not mean scrambled through, as we would, alas, have reason to suspect at home. When it engages to present the exacting works of the Schoenberg group or of other modern composers, it performs them with the authority of intimate knowledge.⁶

The Amar Quartet had an intense schedule. For example, in 1924 they performed 129 concerts in Germany and other countries. Hindemith worked with the Amar Quartet until 1929, holding concerts in Germany, France, Italy, Czechoslovakia, Latvia, Denmark, Great Britain, and Russia. They premiered the music of Webern, Schoenberg, Bartok, Jarnach, Odak, Finke, Sternberg, and many other composers at the Donaueschingen and Salzburg music festivals. These premieres were significant events in the musical world. However, after a tour in Russia in 1929, Hindemith decided to leave the Amar Quartet because of his busy schedule as a composer and composition teacher at Staatliche Hochschule in Berlin.

Playing in the Amar Quartet, Hindemith promoted his own compositions, met other composers and musicians, and advanced his solo career. He met Serge Koussevitzki, who conducted his performance of *Kammermusik no.5* for viola and orchestra in Paris. Soon after successful concerts in Paris, Hindemith appeared as a soloist in London, where he gave the first performance of the William Walton viola concerto on 3 October 1929. This concerto was

⁶ Edwin Evans, "Donaueschingen and Salzburg Festivals," *The Musical Times* 64, no. 967 (1923): 633.

dedicated to British violist Lionel Tertis, who did not perform it until one year later, after Hindemith already introduced it to the public. Tertis had little patience with and understanding of modern music.⁷ Thus in two ways, Hindemith's role in the evolution of modern viola music was significant: through the expansion of the viola repertoire in his compositions and by performing the music of other modern composers.

After leaving the Amar Quartet, Hindemith continued playing chamber music with his colleagues from Staatliche Hochschule -- Josef Wolfstal (violin) and Emmanuel Feuermann.⁸ After Wolfstal's death his place was filled by Szymon Goldberg (Berlin Symphony Orchestra Concertmaster 1929-1934). The trio performed several concerts abroad (Copenhagen, Brussels, London), and in 1934, they made commercial recordings of Beethoven's Serenade in D-major op. 8, two of Hindemith's string trios, Mozart Duo for violin and viola, and Hindemith's Duo for viola and cello. The latter was written in three hours right before it was recorded. In the same year Hindemith recorded his Sonata for viola solo op.25, no.1.

It was a busy time for Hindemith as he was writing his opera *Mathis der Maler*, teaching composition, experimenting with *Gebrauchsmusik*, and resisting the societal influences of the Nazi party; he could not afford to spend too much time practicing viola, but the recordings from 1934 reveal that Hindemith was a very strong viola player. Recordings with Feuermann and Goldberg show Hindemith's art as a violist: his intonation and sound quality is very good, his use of vibrato is accurate, articulation and strokes are precise; he is a wonderful chamber musician. The recording of Solo Sonata op.25 is not as good: the sound is rough and sometimes overpressed, and the intonation is not perfect. Music of solo sonata op.25 is intensely expressive

⁷ David Dalton and William Primrose, *Playing the viola: conversations with William Primrose* (Oxford: Oxford University Press, 1988), 2.

⁸ Cellist, taught in the Curtis Institute after 1934.

and gives the signs of changed harmonic language; it required new qualities of the viola sound as it implied by Hindemith's marking "tearing tempo, wild, tonal beauty is incidental" in the fourth movement. It is tradition nowadays to perform it with stiff, sometimes aggressive sound. According to reviews and his own recordings, this tradition comes from Hindemith's own playing. He was criticized for his rough sound, lack of vibrato, and unexpressive playing not only with that sonata. His intention was to find qualities of sound that would fit his music. In his letter to Willy Strecker on 25 August 1925, he wrote: "Since practically all musicians have been brought up in the tiresome romantic manner, full of *rubato* and 'expression,' they almost invariably play my things wrong. For that reason it would of course be better for the pieces to be first heard in an authentic form – after that everyone can do as he likes."⁹

3. Last stage of a Hindemith-performer, *Der Schwanendreher*

The last stage of Hindemith's performance career related to his life outside of Germany. After the Nazi party came to power, Hindemith was forced to live and work abroad, even though he still had a position as a professor at Staatliche Hochschule in Berlin. He had problems with the Nazis because his wife, Gertrud Rottenberg, was Jewish. In 1934, the "Hindemith's case" started: his music was called "Jewish-sponsored musical Bolshevism" and was unofficially banned; however, it had success in other countries.¹⁰ He established a music school in Turkey, while living in Switzerland, but he was still trying to prove his loyalty to his homeland Germany, not through politics but through his connections to the musical traditions of his native land. His new viola concerto, *Der Schwanendreher* for viola and small orchestra,¹¹ used medieval German

⁹ Hindemith and Skelton, *Selected letters*, 41.

¹⁰ Heinrich Strobel, *Paul Hindemith: Zeugnis in Bildern* (Mainz: Schott, 1961), 56.

¹¹ There are no violins and violas in the score.

folk songs: “Zwischen Berg und tiefem Thal” (Between Mountain and Deep Valley) used in the first movement; “Nun laube, Linden, laube” (Now grow, small Linden Tree, grow) and “Der Gutzgach auf dem Zaume sass” (The Cuckoo Sat on the Fence) used in the second movement; and “Seid ihr nicht der Schwanendreher” (Are you not a Schwanendreher) as a theme for the variations in the third movement. These medieval songs were selected from one particular source, Franz Magnus Bohme’s *Altdeutsches Liederbuch*. He had already incorporated folk tunes into his compositions with his *Mathis der Maler* as well as his *Music to Sing and Play*. His viola sonata op.11 no.4 features folk-style tunes as well, but in *Der Schwanendreher* folk songs play a more significant role. In the preface to the score of the concerto, Hindemith says: “A musician [Spielmann] arrives at a merry gathering and displays what he has brought with him from afar: songs grave and gay, and a dance to end with. As the real musician he is, he expands and embellishes these tunes according to his ability and fancy, preluding and improvising.”

The name *Der Schwanendreher* has the double meaning. It means a swan-turner, person who turns a roasting swan on a spit; and it also has a reference to a medieval musician, who plays on a hurdy-gurdy, specific folk instrument that has a turning handle, swan-like shape, and can play both the drone and the melody. Hindemith’s idea was to show different styles of German music, using the folk songs as a material for that: *cantus firmi* in the first movement, choral setting and fugal subject in the second movement, and the theme and variations in the third movement.¹² This concerto was Hindemith’s attempt to defend and identify himself as a German composer.

¹² Soomi Lee, “Musical Borrowing in Four Twentieth-Century Works for Viola By Hindemith, Bloch, Bacewicz, and Shostakovich” (D.M.A. diss., University of Cincinnati, 2010).

He premiered *Der Schwanendreher* in Amsterdam on 14 November 1935. The next performance was to be held in London, but because of the death of King George V, Hindemith decided to change the piece and wrote another piece for viola, his *Trauermusik* for viola and string orchestra. It was performed on 22 January 1936, and was broadcast by the BBC. At this time, friends and colleagues such as Fritz Stein and Wilhelm Furtwangler tried to convince the German government to stop banning Hindemith's music. But neither these efforts nor his success in other countries could help Hindemith redeem his damaged reputation. In 1937 he left Germany for more than fifteen years.

From 1937 to 1939, Hindemith had three concert tours to the United States. These tours changed his life by leading to his immigration in 1940.¹³ In the first tour in 1937 he performed *Der Schwanendreher* and the solo viola sonata, written during this tour. However, he never published that sonata after being unsatisfied with its premiere in Chicago. Schott Music published it only after composer's death.

Hindemith particularly enjoyed playing with the Boston Symphony orchestra under Arthur Fiedler, and appeared in concerts in Washington, Buffalo, New York, and Chicago. Olin Downes characterizes Hindemith's performance of the *Der Schwanendreher*: "Needless to say, this music was played with complete authority by an exceptionally practiced and expert performer upon his instrument." However, he mentioned that Hindemith's manner of playing was "rough" and "fibrous," and that "there is a correspondence between the style of the player and the composer".¹⁴ The second tour to America took place in 1938. Hindemith was satisfied with these performances of his sonatas but mentions technical problems with playing

¹³ Luther Noss, *Paul Hindemith in the United States* (Urbana: University of Illinois Press, 1989), 13-55.

¹⁴ Olin Downes, "Hindemith soloist at philharmonic," *New York Times*, April 16, 1937.

Kammermusik no. 5: “I had practiced hard on the preceding days, so I was in good form. However, that did not prevent me... from finding this piece overly ornate and overloaded in spite of the small number of instruments. On top of that, I found it hard to summon up the energy, after the ninety times I had previously to play it, to cope with the many difficulties of the solo part. Still, with a bit of effort I managed it.” Primrose mentions that Hindemith had an instrument with a sound that “should cut through a steel door.”¹⁵ During the last American tour, Hindemith both played and conducted. He finished his third sonata for viola and piano, and premiered it at Harvard University on 19 April 1939, just 10 days after it was finished. His 1939 sonata represents his mature style but has features of his previous compositions for the viola. The second movement, *Fantasia*, is reminiscent of his first movement from the sonata op. 11 no. 4.¹⁶

During the tour, he played concerts and lectured in music theory at universities and colleges. However, in some cities his music was received badly. First, appreciation of modern music in America could vary from city to city. Second, according to concert reviews and to his recordings of *Der Schwanendreher*, *Trauermusik*, and Sonata for viola and piano no. 3, made in 1939, he had technical difficulties and his sound became somewhat thinner. This difference could be heard in comparison with his recordings from 1934.¹⁷ However, Hindemith’s playing is still impressive in terms of technique, intonation, and overall quality of the musicianship. In 1940, while on the faculty at Yale University, Hindemith decided to quit performing the viola in

¹⁵ Hindemith and Skelton, *Selected letters*, 111; Dalton and Primrose, *Playing the viola*, 169.

¹⁶ Setareh Beheshti, “Hindemith and the Viola,” accessed winter-spring 2002,

<http://www.soundpostonline.com/archive/winter2002/page3.htm>,

<http://www.soundpostonline.com/archive/winter2002/page5.htm>,

<http://www.soundpostonline.com/archive/spring2002/page8.htm>;

Daejin Whang, “Observations of Paul Hindemith's approach to form and tonal language: The three sonatas for viola and piano,” (D.M.A. diss. University of Hartford, 2005).

¹⁷ Cecil Smith, “Critic Analyzes Revolt Against Modern Music,” *Chicago Daily Tribune*, March 13, 1938; Gama Gilbert, “Hindemith offers own compositions,” *New York Times*, April 24, 1939; “Review of Hindemith’s recordings,” accessed May 1994, <http://www.gramophone.net>.

public after listening to a recording of his viola sonata, made the year before. He had his last appearances in concerts as a soloist in 1942, playing viola in Brahms string sextet and Heinrich Biber's *Biblical Sonatas* for violin and continuo with faculty and students.

Hindemith was very confident about himself and uninterested in the public's reaction. He made his own judgment of whether his compositions should be published or when he should discontinue public performances as the soloist. Paul Hindemith received heavy criticism both for his music and for his playing over the course of his career. But as we have come to understand, his contributions to the music world were significant and worthy of recognition.

4. Conclusion

Hindemith's accomplishments as a performer characterize him as a great solo violist in the beginning of the twentieth century, as well as a wonderful chamber musician. His ideas always had practical inspirations. Chamber music, sonatas for solo instruments, and stage music related as compositions to his activities as a performer-musician. He always tried to make his music understandable and playable. The music is understandable through his use of contrapuntal writing, recognizable themes, and strictly organized forms, and performable through his intimate knowledge of the instrument. Hindemith's teaching methods were also practical: in music history and theory classes he asked his students to play music. He was sure that theories were only useful if they were also practical. All the activities related with *Gebrauchsmusik* in Germany and early music in the United States served the people who would play the music. The music for young and amateur musicians was very important as Hindemith wrote in the modern style with the intention to help people become familiar with this new musical language. To make music for everyone to play and listen to was Hindemith's primary goal. This practical approach of

Hindemith's creativity is a key point for this research. Hindemith's performing abilities had significant consequences for his compositions. He wrote idiomatically for the viola as a result of his own proficiency on the instrument. As a performer he found new characteristics of the viola's sound, which expanded traditional musical vocabulary and influenced both performers and composers. I believe that the source of Hindemith's theories developed from his instrumental background, and that for any performer of his works it is important to remember the significance of that connection.

II. HINDEMITH'S SONATA OP.11 NO.5 FOR VIOLA SOLO:

1. History of the genre and influences

To fully understand the influences in Hindemith's sonata for unaccompanied viola we need to look back into the history of this genre. The genre of a sonata for solo stringed instruments, such as violin, viola, or cello is unique in many ways. It implies a form of multi-movement piece with individual characteristics of each movement, use of various colors and techniques, and requires a highly proficient musician who can perform technically challenging pieces without the support of an accompanist. During the Baroque period, string instruments became popular. A variety of techniques such as chords, arpeggios, and different strokes, made string instruments well suited for unaccompanied pieces. Composers, who mostly were performers as well, were experimenting with the different possibilities of solo instruments. Pieces for unaccompanied violin before Bach were written by Thomas Baltzar (1630-1663), Johann Jacob Walther (1650-1717), and Heinrich Ignaz Franz Biber von Bibern (1644–1704). Johann Paul Westhoff (1656–1705) wrote the first extant examples of solo violin pieces conceived in few movements: Suite for solo violin (1683), and 6 partitas for solo violin (probably 1695). Bach not only used the example of these pieces, but he went much further in developing string technique, especially with the use of contrapuntal writing for string instruments. Bach wrote 6 Sonatas and Partitas for violin solo (starting around 1705 and finishing in 1720) and 6 suites for unaccompanied cello (1705-1723), which are the most important examples of polyphonic string music from the Baroque period.¹⁸ In his sonatas and partitas, Bach uses implied polyphony and free-voiced texture that are close to the *style brisé* for lute by Denis Gaultier (1603-1672).

¹⁸ Yu-Chi Wang, "A survey of the unaccompanied violin repertoire, centering on works by J. S. Bach and Eugène Ysaÿe" (D.M.A. diss., University of Maryland, 2005).

A few other examples of this kind of composition from the late Baroque should be mentioned: Georg Philipp Telemann's (1681-1767) sonata for viola da gamba without continuo (1728-1729) and 12 fantasies for violin solo (1735); and *piccolo sonatas* for violin by Guisepppe Tartini (1692-1770). Although Tartini transcribed continuo lines for these sonatas from the *Paduan manuscript*, in his letter from 1750 he said, "The small sonatas of mine . . . are notated with a bass part for the sake of convention [per cerimonia]... I play them without the bass, and this is my true intention."¹⁹

The Classical period was dominated by solo sonatas for piano, sonatas for solo instrument with piano accompaniment, and duo sonatas. Some exceptions include solo sonatas for violin by Friedrich Wilhelm Rust, which demonstrate the remnants of the late Baroque heritage rather than classical tendencies.²⁰

Homophonic textures became predominant during the Classical and Romantic periods. The harmony functioned not just to supplement the melody but also to emphasize tonal relationships between movements, and between internal sections of the movements. There was little space for unaccompanied instruments. Caprices and etudes, cadenzas or short pieces were composed mostly for educational purposes, or for encores. As the social role of music had changed, there was no place in a concert for the unaccompanied violin or viola. Ensembles and collaborations, or soloists with an accompaniment of the orchestra or the piano were more desirable by audiences.

¹⁹ Paul Brainard, "Tartini and the Sonata for Unaccompanied Violin," *Journal of the American Musicological Society* 14, no.3 (1961): 383-93.

²⁰ Friedrich Wilhelm Rust (6 July 1739 — 28 February 1796) wrote 3 sonatas for violin solo. Composition, organ and clavier he learned from Friedemann and Emanuel Bach, and the violin from Carl Höckh and Franz Benda; and in 1765, during a journey to Italy, from G. Benda, Tartini and Pugnani. One of his solo sonatas has 6 movements: Grave, Fuga, Gigue, Chaconne, Gigue (reprise), and Courante.

Niccolò Paganini (1782 - 1840) seems to have been very close to resurrecting the genre of the sonata for unaccompanied violin. His sonatas for violin and guitar as well as his caprices for violin demonstrate that he had the entire inventory he needed to write a solo sonata. However, it seems that he never attempted such a composition. “Though Paganini is always admirable, he is never more so than when he passes from the support of the orchestra, and performs solo; then are seen together the power of his miraculous hand, the delusion of his many-voiced play, the secret of which is his alone; it is worth while to hear him on the four strings at once...”²¹ Paganini’s technique was beyond the imagination but he mostly performed his own compositions. As he probably never encountered solo pieces by Bach or other Baroque composers, he did not have the reference to that genre. Probably the only violinist who wrote violin solo sonatas in nineteenth century was Benjamin Godard (1849-1895). A French violinist and composer, Godard studied at the Conservatoire de Paris in 1863 under Henri Vieuxtemps (violin) and Napoléon Henri Reber (harmony). Godard composed two sonatas for solo violin: Sonata No.1 for Solo Violin, Op.20 (around 1872-74); and Sonata No.2 in A minor for Solo Violin, Op. posth. (1894-95). Both sonatas combine Romantic traditions of violin performance with Baroque formal influences. However, Godard was well known because of his operas, symphonies, and concertos for violin and orchestra. His solo sonatas were rarely performed at that time by other violinists.

The beginning of the twentieth century became a turning point for this genre. Several factors may account for the rapid expansion of solo repertoire. Musical performances had moved from the courts to the cities. Starting in the eighteenth century and until the end of the nineteenth century, public concerts became a common form of entertainment. The role of the individual

²¹ C. Dingley, "Some Account of Paganini." *The Euterpeiad: an Album of Music, Poetry & Prose (1830-1831)* 1, no. 7 (July 15, 1830): 49.

performer was stronger than ever. Virtuosi soloists not only traveled around the world performing concerts, but many of them also established music schools or taught in conservatories. The development of music educational institutions during the nineteenth century created a demand for the solo repertoire. Composers were writing music to introduce their music to the public and to promote themselves. In the beginning of twentieth century music shifted from large ensembles of Romantic period towards less expensive chamber music and that trend was supported with the opening of music festivals and music societies.

The last and maybe the most important reason for resurrection of the unaccompanied sonata genre was the reappearance of Bach's music. His sonatas and partitas for violin solo gave composers and performers great examples and challenges. Felix Mendelssohn initiated the rediscovery of Bach's music back in 1830s but the traditions of performing Bach's solo sonatas in the way in which they were composed had yet to come. The first violinist to perform Bach's sonatas for solo violin in public (with piano accompaniment by Mendelssohn and Schumann) was Ferdinand David (1810-1873), the pupil of Spohr, concertmaster of Gewandhaus orchestra from 1836, and Professor of violin in Leipzig from 1843.²² Another great violinist of that time, Joseph Joachim (1831-1907), in his concerts in the end of nineteenth century performed single movements from Bach's sonatas and partitas as encores, or as solo pieces.²³ Lionel Tertis (1876-1975) played his own arrangement of Bach's chaconne on the viola in 1911.²⁴ But the first violinist to perform Bach's complete sonatas and partitas was Joseph Szigeti (1892-1973).

²² David Milsom, *Theory and practice in late nineteenth-century violin performance: an examination of style in performance, 1850-1900* (Aldershot, Hampshire, England: Ashgate, 2003), 19.

²³ *The Musical Times and Singing Class Circular*, Vol. 14, No. 326 (Apr. 1, 1870), p. 429

²⁴ Maurice W. Riley, *The history of the viola* (U.S.: s.n., 1980), 245.

The following is a list of sonatas, partitas, or suites, that were composed in the first fifteen years of the twentieth century, and does not include other pieces for solo strings:

1900	4 Sonatas op. 42 for violin solo	Max Reger (1873–1916), Germany
1901	Sonata for Violin solo op.22, no.2	Joseph Jongen (1873–1953), Belgium
1905	7 Sonatas op. 91 for violin solo	Max Reger (Ibid.)
1907	Suite for violin solo op.68	Émile Sauret (1852-1920), France
1911	Sonata for Violin solo Op.88	Sigfrid Karg-Elert (1877—1933), Germany
1910	Partita for Violin solo Op.89	Sigfrid Karg-Elert (Ibid.)
1915	Sonata for Solo Cello Op.8	Zoltán Kodály (1882 —1967), Hungary
1915	Three Suites for viola solo op.131	Max Reger (Ibid.) ²⁵

Max Reger's sonatas for solo violin op.42 and op.91, written in 1900 and 1905, were probably the first significant sonatas for unaccompanied violin since the eighteenth century. Reger was also the first who composed multi-movement pieces for unaccompanied viola (Three Suites for viola solo op. 131, 1915).²⁶ Before that the viola as a solo instrument was represented mostly in etudes and caprices, or short pieces for solo viola like *Capriccio 'Homage à Paganini'* Op.55 by Henri Vieuxtemps, arrangements of opera arias by Alessandro Rolla, or Six Idylles for solo viola by Antonio Rolla (son of Alessandro).

There is no documented evidence that Hindemith performed or was familiar with Reger's compositions for solo instruments. However, many scholars mention Reger's influence upon Hindemith's composition, and it is known that Reger was a good friend of Hindemith's professor Arnold Mendelssohn. Structural and stylistic similarities between Hindemith and Reger's

²⁵ Wang, "A survey," 77-79.

²⁶ It is known that J.S. Bach, who was a violist himself, performed his cello suites on viola, and during the Baroque period it was not always necessary to specify what instrument should perform the piece. However, Reger's suites are written specifically for solo viola.

unaccompanied compositions for the violin and viola suggest that Reger's suites for viola solo and sonatas for violin solo were a reference for Hindemith.

Hindemith's compositions written before 1917 follow the Classical and Romantic traditions of German music. The change in Hindemith's style can be noticed from the second String Quartet, Op. 10 and the Six Sonatas, Op. 11. He confirmed this on the sketches for the Sonata for Violoncello and Piano, Op. 11 No. 3: "A transformation is taking place here!" Hindemith's choice of the genre of the sonata for unaccompanied instrument is the perfect exemplification of his strengths. As a performer he was comfortable writing for the instruments that he played.

Hindemith wrote his sonata op.11 no.5 in 1919 and performed it for the first time on November 14, 1920 in Friedberg. He dedicated this sonata to Carl Schmidt who was a professor of philology, father of Hindemith's pupil Wolfgang Schmidt, a good pianist, and a promoter of the concerts where Paul and his brother Rudolf played frequently. In the letter to Dr. Schmidt, dated August 23, 1919, Hindemith writes:

...I journeyed to Holland with the firm intention of dedicating to you the first major piece I should complete... Since I was unable to play J.S.Bach Ciacona to you, but did not wish to leave you entirely without a ciacona, I have taken the liberty of serving one up for you in the sonata's last movement.

2. Structural and thematic analysis of the movements

There are few scholars who have written about Hindemith's music. They primarily analyze his later works when he had already stated and started to follow his theories. David Paul Neumeyer²⁷ provides an analysis of Hindemith's early compositions. Neumeyer's approach to analysis varies from one piece to another. He uses Schenkerian method for sonatas op.11 no.5 and op.25 no.1 for viola solo; and he analyzes pitch set classes in Sonata for Cello solo op.25

²⁷ David Neumeyer, *The music of Paul Hindemith* (New Haven: Yale University Press, 1986).

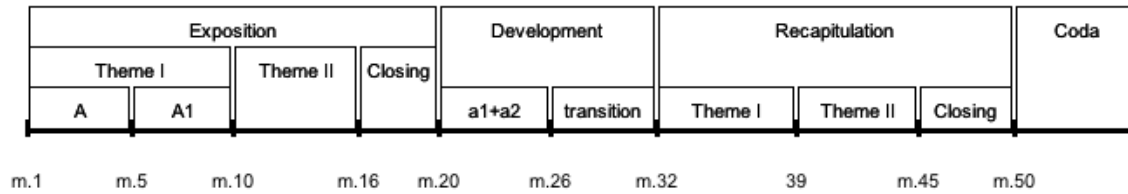
no.3. However, none of those methods could completely describe the pieces mentioned above, as they hardly could be bound with one particular system. Even Hindemith himself was short-spoken about how exactly he was composing music in his early period, as that was a period of experimentation. For most of Hindemith's compositions Neumeier uses his own analytic method that combines Hindemith's own theories, features of Schenkerian analysis, contributions of other scholars, and represents a comprehensive five-stage system. However, Neumeier points out that his system is just one interpretation of Hindemith's music and not a system of rules for how it should be understood. This document will limit even the use of Neumeier's approach to the basics: structural elements, step progressions, tonal framework, and melodic activity. First, complex harmonic analysis of a composition for unaccompanied instrument is not always possible as the melodic activity has more important role than harmony. Second, the main purpose of this document is to illustrate the roots of Hindemith's music in his performance background.

Sonata conceived in 4 movements:

1. *Lebhaft, aber nicht geeilt* (Lively but not rushed)
2. *Mäßig schnell, Mit viel Wärme vortragen* (Moderately fast, perform with much warmth)
3. *Scherzo*
4. *In Form und Zeitmass einer Passacaglia* (In form and tempo of Passacaglia)

This sonata anticipates Hindemith's theories in its chromaticism and pitch-oriented treatment of tonality. The relationships between pitches, emphasized by the use of cadences, make this piece rather centric than tonal. There is no key signature but every movement has its resolution tone or tonic. The Scherzo, more traditional in terms of tonality, is written in C#-minor with the middle section in F#-major. Other movements end with the pitch of C.

First movement: Lebhaft, aber nicht geeilt.



The first movement is in sonata form with a short development section and coda both based on a first theme. To describe the way Hindemith organizes his music, motivic analysis of the first movement is provided.

First theme A (mm.1-4) built from three motives:

1. Chordal statement **a** – two parallel chords
2. Pickup motive **b** – semitone-built pattern of contrary motion
(G-Ab, D-C#, B#-C#, Ab-G)
3. Resolution motive **c** – the resolution is rather rhythmic than harmonic

These motives have distinctive characteristics; they are the building blocks of the first theme, and Hindemith combines them in different ways. After initial statement of all three motives, Hindemith repeats the motive **b**, and the beginning of the motive **c**, but instead of

resolution, repetitions of the motive **c** follow (m.4). Descending pattern ends with the whole-tone tetrachord that leads to the next section. Such progression of motives, which we could call a sequence in a broader meaning, is one of the most common method for the development of the motives. It gives direction, creates tension, and plays an important role in connecting sections.

Theme **A** had motivic structure **a-b-c-b-c-transition(c)**, but in the repeat Hindemith changes the theme to **a-b-a-b-transition(c)**. At the end of **A1** in mm.8-9 he makes a line of sequences based on material of motive **c** going to an A-major chord. The line that starts in the top voices travels by intervals of thirds downward in a stepwise motion from C-E to B \flat -D, while the low voice moves by half steps from D to A where both lines meet in m.10 at the A-major chord:

The first theme stays unresolved until m.10, where Hindemith gives an A-major chord, which gives the feeling of a strong closure and indicates the end of the section. This A-major chord has the strongest harmonic weight and separates first and second themes. It is remarkable how Hindemith uses dissonant prolongation for a theme. The first motive consists of two chords constructed by combining the intervals of a tritone and a major third. These chords could be described as half-diminished chords, but because of a missing tone and the fact that the second chord is a transposition of the first chord (semitone lower), the sonority that this motive produces does not imply clear harmonic function. Hindemith demonstrates that the musical statement does not require strong feeling of tonality to function as a theme. The first theme in this sonata is

similar to the theme from Sonata op.25 no.1 for viola solo, which opens with chords and a semitone-built motive:



Theme II (mm.10-15) contains 4 phrases, with the descending motion in the 2nd and 3rd phrases. A thoughtfully organized progression in measures 12-13 creates a semitone motion using different voices within the texture. As the top voice is easier to hear, it is important to show clearly the voicing of the lower notes of a chord. Hindemith preserves the 4/4-meter only in writing; phrases of the second theme suggest the same free meter as in the first theme, where barlines emphasize the structure. In this sonata, Hindemith notates the time signature only in two movements out of four--Scherzo and Passacaglia--where the structure is more consistent. The following example is divided according to the melody. It is a question of interpretation where to place “downbeats” when performing this passage. The dotted rhythm of this theme is typical for Hindemith’s music. It can be found in Cello sonata op.25 no.3, *Mathis Der Maler*, *Der Schwanendreher*, *Trauermusik* and many other compositions. To show the character of this rhythm clearly, it should be executed precisely with the pickup note leading to the next beat, and an active impulse generated by rests and subdivision of dotted eighth notes even in a *piano* dynamic.

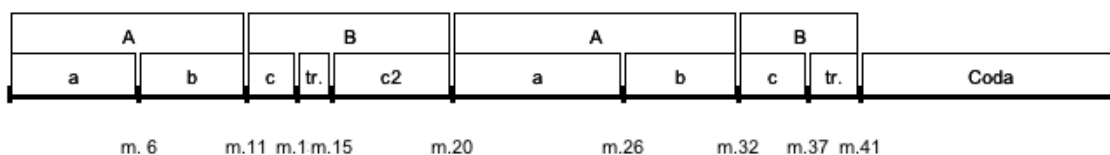
The closing section (mm.16-19) is based on **a** and **b** motives with a C pedal in the low voice and E as a dominant that leads to A. The pickup motive **b** in the closing theme is transformed to the ascending gesture to E in the top voice of a chord, instead of the opposite motion as it is in the beginning. Hindemith prepares the E-major dominant first by a pickup motive going to E, then by displacing the tritone symmetrically on top of D# rather than below B, serving as the predominant chord. The shifts with both third and first fingers for parallel major third in chords of that section would allow a more stable hand position and use of stronger fingers.

In the development section (mm.20-31), Hindemith combines the chordal statement **a** and pickup motive **b** as in **A1** and the closing theme. This section goes from the pitch Db to D and comes to a cadence in F#-major in m.25, after emphasizing F# in the top voice and the line G#-G-F# in a low voice. The transitional material is sequential and based on a pickup-motive **b** and a

whole-tone scale. It leads to a recapitulation. In mm.27-29 it is almost a mirror inversion of the pickup-motive from the beginning.

In the recapitulation, Theme I (mm.32-38) combines all the motives. Hindemith uses material freely and uses sequences again to reach his desired destination in terms of voice leading. This time he changes the transition to the second theme. He connects Theme I with Theme II just with one passage without strong closure, and shifts to the character of Theme II smoothly with diminuendo. Theme II (mm.39-44) starts *piano*, crescendoing closer to the end. It is higher in pitch (major third) than in the exposition. Hindemith creates different voicing for chords and in this way he comes to different pitches than in exposition. The third phrase ends with an Eb-major chord. The fourth phrase, starting a whole-step lower, moves to its closing theme: the melody leads to the chord with the leading tone to the low voice.²⁸ In the closing theme (mm.45-49), the first note of the pickup motive creates a whole-tone step progression G-F-Eb-Db and leads to C as a resolution for the whole movement. Following that, the Coda (mm.50-55) starts as a development section with C as a central pitch. It combines chordal motive **a** and dotted rhythm from the second theme.

Second movement: Mäßig schnell, Mit viel Wärme vortragen



The second movement is a two-part form with the coda. The **A**-section contains two phrases: **a** (mm.1-5) and **b** (mm.6-10). The first phrase (**a**) moves to pitch B that is a leading tone to the beginning of second phrase (**b**), which starts from the C-major chord. Hindemith uses a sequence

²⁸ In the exposition, the leading tone was used for the top voice.

and leading tones as a method of creating a direction towards his desired destination.²⁹ He uses whole-tone scale or smaller whole-tone sets as another productive shortcut to connect motives or sections.³⁰

whole-tone scale: A#-----G#-F#-E-D-C-----A#

1 V C(I) E(iii) 2 Eb(♭III) G(V) 3 4 5 tr F#(V of B)-----B-----A#/C#----->B

6 harmony: D-----F#(I)-----

9 D#->B C#-->A# C----->A

10 melody:-----E---D#(V)-----g#/D-----C#(V)-----F#---E#---E(VII)----F

harmony:-----g#(ii°)-----F#(I)-----F(?)

Phrase **b** continues the use of tertian relationships between the motives in a sequence (C→E, D→F#). The line in measures 9 and 10 feels incredibly natural as Hindemith moves through the cycle of fifth D#-G#-C#-F# but surprises the listener by ending in F. On a harmonic level, that modulation looks quite unprepared, but with the consideration of the melodic lines in different voices it connects smoothly. The melody and harmony in Hindemith's music connects in such inseparable ways that even when he moves fast through different tonal spheres in one theme, it feels like a big gesture rather than a kaleidoscope of modulations.

For m.6 and m.8, it is possible to use identical fingering starting in second position. With the semi-tone shift of the third finger after the chord, it is comfortable to play the second chord

²⁹ The harmonic analysis is taken from Neumeyer, *Music*, 118.

³⁰ Example of a short whole-tone set: two last beats of measure 4 in the first movement (Bb-G#-F#-E, E leads to D#, Theme I repetition)

as the hand is already in the right position. Sliding with the same fingers works well with thirds in the end of mm.6 and 8, and in the low voice of m.10. In many cases this type of shift is the best possible option as it helps to connect positions and preserve the distance between fingers for the same intervals, which is important for better intonation. These and many examples of such fingering solutions from the first movement suggest that the semitones in Hindemith's music for viola not only play an important role in harmony and melody, but also have idiomatic applications on the instrument.

A harmonic analysis of the **A**-section is possible because of the chordal association of the intervals in the **a**-phrase (octaves and fifths), and full chords in **b**. The **B**-section (mm.11-19), however, does not provide clear chordal association, as it has a polyphonic nature. The **B**-section is full of step-progressions in different voices that connect motives.

In mm.15-18, Hindemith writes a two-voice passage that is idiomatic as it has only one possible fingering solution. The only way to keep long notes in the low voice sounding and to not have shifts that could be heard under the slur, fingers indicated below should be used.



In the beginning of m.16, the second fingers for the D# works the best as it can be prepared while playing previous B with the third finger. Playing D# with the third finger would add a jump of the third finger from B to D#; and even between the slurs it adds an unnecessary break which could be avoided. In the second half of m.16, where fifth occurs between D and A, the second finger should be prepared by placing it on both strings when shifting from D# to D. These fingerings represent an example of the strong connection between the instrument and the composer.

The **A1** section (mm.20-31) starts from a Db and the whole section is transposed a half-step higher than the **A**-section. In mm.20-21 Hindemith added improvisational passages in to phrase **a** (mm.20-25). Both passages are the examples of idiomatic writing for viola. They are reminiscent of passages from the Sonata op.11 no.4 for viola and piano by its smooth playability when proper finger preparation is applied. The second passage (m.21) uses the pentatonic scale. Hindemith makes the transition to phrase **b** longer and more exciting with an accelerando and crescendo both to C and than to Db of the beginning of phrase **b**. In the end of **b** (mm.30-31) he writes a sequence that leads back to C but interrupts it with phrase **c** (mm.32-36), which represents the dominant prolongation of pitch G (V of C). The transition (mm.37-40) and coda (mm.41-46) both confirm C as a tonic of the whole movement. The inner structure of the transition is worth noting, as the beauty of this passage is in its symmetry. Combined by two notes, it creates a line of intervals for every half of the bar. Combined by three notes (which is emphasized by slurs), it could be described also through pitch sets. Hindemith breaks patterns in the end of every measure by changing the last note so it would be a leading tone to the next measure. In the end of that passage, stepwise motion is organized by three notes, but this time the pattern is not supported by slurs, so the passage flows naturally to the end.

The image shows a musical score for viola, measures 37-40. The score is written in 3/4 time and includes interval patterns and pitch sets for various phrases.

Measure 37: $P0[0,1,0]$, $RI[0,1,0]$, $R[0,1,0]$, $I?[0,1,1?]$

Measure 38: $P[6,1,0]$, $RI[0,1,6]$, $R[6,1,0]$, $I?[0.1.6]$

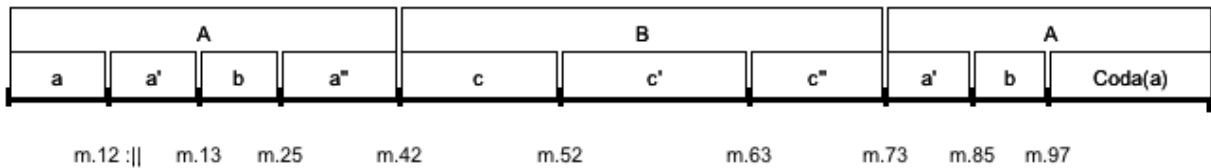
Interval pattern: 13 -1 13 -1 13 -1 -11 -1 -11 -1 -12 C->Db 7 -1 7 -1 7 -1 -5 -1 -5 -1 -6 Db>C -1

Measure 39: $P0[0,2,3]$, $RI[0,2,3]$, $R[0,2,3]$

Measure 40: -1 -1 -1

The coda (mm.41-46) is based on a material of **a**. Hindemith reduces the tension; he avoids leading tones of C and any chromaticism after m.42.

Third movement: Scherzo



The third movement is a scherzo, and Reger's influence can be seen very clearly in this movement.³¹ The "Scherzo" in Hindemith's sonata follows the tradition in terms of structure: it conceived in compound ternary form **ABA** in C#-minor with middle section in F#-major.

The **A**-section has features of a rounded binary form:

a (mm.1-12) 3-phrase period (mm.1-4,5-8,9-12) "abb" structure

a' (mm.1 - to second ending, m.13) Repeat with ending in A(VI) of C#

A (mm.1-13). Harmonic reduction after Neumeyer:³²

b (mm.14-24) This material has less tonal reference and serves as a digression. However, distinctive rhythmic and melodic gestures give this theme individual character. It contains two

³¹ In character and form it is very close to movements from Reger's compositions for unaccompanied strings, such as the third movement of his sonata for violin solo op.42 no.1, the Scherzo from his solo cello suite op.131c no.3, every second movement of his solo viola suites op.131d, and Vivace from sonatas for violin solo op.91 no.3 and no.4. They all have triple meter, a moderately fast tempo, and a contrasting middle section.

³² Neumeyer, *Music*, 119-20.

phrases. The first phrase concludes with glissandos of intervals of a sixth from the third phrase of **a** (mm.18-20); the second phrase moves to **a''** with a line of ascending sixths in mm. 23-24. **a''** (mm.25-41) returns to C# through the whole-tone interpolation. Hindemith uses the same method when he changes the level of transposition between motives so that the theme sounds almost identical but comes to a different result.

Section **B** (m.42-72) has a center of F# (IV of C#). This section is very close to middle sections of similar Reger compositions with its slower tempo, more lyrical character, and the passages of double stops.

Hindemith. Beginning of the Trio-section in the Scherzo:

viel langsamer, gesangroll

Max Reger. Trio-section from Suite for viola solo op.131d no.1 in g. Vivace, mm.54-67:

Andantino
espress.

Max Reger. Trio-section from Suite for viola solo op.131d no.2:

Quasi meno mosso

p espress. *p* *poco rit.* *a tempo* *p* *rit.* *p* *Allegretto da Capo al Fine.*

Hindemith exhibits in the Trio-section a great knowledge of the instrument. The obvious distinction between Hindemith and Reger's writing from the performer's perspective is in the varieties of double-stops used and the ways they could be connected with each other. It is related not only to the more harmonic and tonal complexity of Hindemith's music, but it is also rooted in the way Hindemith sees an instrument and its possibilities in using double-stops. While Reger uses mostly thirds and sixths, often in parallel motion, Hindemith creates two-voice passages where individual voices more independent.

The trio section in Hindemith's sonata consists of three phrases:

c (mm.42-51) with a cadence in mm.50-51: F#:IV-N-V7.

c' (mm.52-63) with a two-voice chromatic scale in mm.57-60 and then whole tone interpolation in mm.61-62

c'' (mm.63-72) starts in E-major and as a sequence moves to F# and then to G# which is dominant in C#. In the Cadence (mm.71-72) Hindemith uses the Neapolitan chord again: C#: N-V-I.

In the return of the **A**-section, phrase **a** (m.73-84) remains without any changes. Phrase **b** (mm.85-96) is shorter without glissando motives; and an effective coda (mm.97-121), based on a

material of **a**, ends a movement.

Fourth movement: In Form und Zeitmass einer Passacaglia

The final movement of Hindemith's sonata is a passacaglia. Variations played an important role in Hindemith's music. Hindemith's conception of the variation procedure evolved during these years in compositions such as Quartet op.10 and sonatas op.11 no.4, no.5. Hindemith combined two types of variation--elaboration and free variation (variation as a fantasy). Hindemith used connection of fantasy and variations first in his Sonata op.11 no.4 and then later in *Philharmonisches Konzert* (1932), the 3rd movement of his viola concerto *Der Schwanendreher*, sonata for viola and piano (1939), and the *Die vier Temperamente* for string orchestra and piano (1940). Hindemith uses the passacaglia, often as the last movement, not only in Sonata op.11 no.5, but also in his String quartet no.5 op.32, the song cycle *Das Marienleben* (1922–3), the opera *Cardillac* (1926), and the opera *Die Harmonie der Welt* (1956–7).³³ The passacaglia in the Sonata op.11 no.5 was related more to Hindemith's performance practice, rather than to the traditions of the genre of variations in general: as it was mentioned before, Hindemith planned to write something similar to Bach's Chaconne.

It seems that the reappearance of that genre in the end of the nineteenth century had been influenced partially by Bach's sonatas and partitas for violin solo. Hindemith as a violinist played the Chaconne, and he decided to challenge himself with that gem of the past not just as a performer, but as a composer as well. The presence of the Chaconne could be seen in the choice of the genre, in the structure, and in the similar instrumental techniques. Hindemith had first

³³ Elaine Sisman, "Variations," *Grove Music Online. Oxford Music Online*. Oxford University Press, accessed March 12, 2013, <http://www.oxfordmusiconline.com/subscriber/article/grove/music/29050pg10>.

attempt to create a piece that would be similar to Bach's sonatas and partitas for violin solo in 1917-18, when he started to work on his Sonata for violin solo op.11 no.6 in g-minor. It was supposed to be no.1, but Hindemith decided to include it among other sonatas of op.11 only in 1919.³⁴ The last movement of that sonata is also multi-sectional and uses different violin techniques such as bariolage, arpeggios, chords, double stops, and virtuosic passages. Some of those techniques, such as extended bariolage passages in mm.49-56, are very similar to Bach's Chaconne (or Prelude from partita no.2 in E) and are used also in Viola sonata op11.no.5.

The name of the final movement of Viola sonata op.11 no.5 ("In form and tempo of a passacaglia") is an indication that Hindemith is not going to remain faithful to the passacaglia form, but will adapt it instead; the first evidence of that is the harmonic formula, traditional for a passacaglia, which is not preserved. The theme of the Passacaglia is a transformed theme of the first movement, a four bar statement. Hindemith enhanced the form by pairing statements in couples as Bach did in his Chaconne. The Passacaglia is 200 bars long.³⁵ The overall form consists of three sections divided by the return of the original tempo and statements that are closer to the theme than the preceding material. The first section ends by two statements in mm.89-96, with the return of the tempo and the character of the theme. The beginning of the second section (m.97) is reminiscent of the beginning of the middle section of Bach's Chaconne, which is in major key and in *piano* dynamic. Two statements in mm.146-153 represent another pillar of the form, which indicated by the return of the original tempo and structure of the theme. For the last time, Hindemith brings back theme (mm.185-193) extended by a coda (m.193-200).

³⁴ Hindemith, Paul, and Hermann Danuser, *Sonate für Violine allein, op. 11 no. 6* (Mainz: Schott, 2002).

³⁵ Other movements combined together are 222 bars long. It is similar to Chaconne in proportions, where all movements combined together are 155 bars and the Chaconne alone is 257 bars long.

The step progression is an important feature in the Passacaglia. It occurs almost in every pair of statements and could be chromatic, whole tone, or modal (diatonic). Just a few examples of these progressions are:

mm.5-6 - bottom voice in chords moves stepwise by whole tone: G-A-B-C#

mm.16-17 – bottom voice moves by semitones A-Ab-G-Gb

mm.21-23 – bottom voice in chords (Bb-Cb-C-Db-D)

mm.31-32 – whole tone interpolation in a sequence

In some cases the progression is not as obvious as in others, for example in mm.97-105, where the highest note of a triplet passage moves F#-G#-A#-B. Again, Hindemith uses these types of progressions over and over to create direction and different voicings within the texture.

For each big section, the similar way of elaboration is preserved: starting from a statement that is similar to the theme in terms of character or structure, it gets more elaborate towards the end of the section. For example, starting from m.55 with bariolage, there is a big section with passages and *ritenuto* in the end that prepares the return of the theme in m.89. Other sections like that are in mm.137-45, and in mm.177-84.

Hindemith's Passacaglia has its special place in the sonata. As Bach's Chaconne, it outweighs other movements by the complexity of its structure, by deepness and the intensity of the music. It overcomes the boundaries of sonata form and may be performed as a self-sufficient composition.

3. Idiomatic writing

From my personal experience, playing Hindemith's viola music as well as his orchestral pieces, I have found that Hindemith's writing for viola is incredibly idiomatic. It is the same

deep knowledge of the instrument that you can find in piano compositions by Chopin or Liszt, or in violin pieces by Ysaye or Wieniawski. Furthermore, he could play almost any musical instrument so he knew the “mechanics” of it completely. I believe this practical knowledge helped Hindemith to develop his theories about harmony and melody later in his career. Hindemith was creating music with incredible speed so his music has both intuitive features, as well as a schematic outline of the whole form. One of these pieces, his *Trauermusik*, was composed on the occasion of the death of King George V in a single evening before a concert. Like many other composers-instrumentalists, Hindemith created some of his compositions in an immediate connection with the instrument. As the example of the instrumental nature of his compositions--his 4th movement of his Sonata op.25 no.1 for viola solo--was conceived first as a viola etude for the right hand.³⁶

In Hindemith’s music it is possible to differentiate three different concepts of his creative process: intellectual, musical, and mechanical. The intellectual concept is related to ideas that could lie outside of the music itself and that shows its presence in the music constructed by “abstract” or “mathematical” rules. It could be seen in motives, symmetrical structures, patterns, and proportions of Hindemith’s music. The musical concept is presented in the purely musical sphere related with form, tonal relationships, harmony, phrase, and rhythm. Mechanical concepts are related to the instrument and its physical nature. The presence of this concept can be found almost in any of Hindemith’s instrumental compositions. As an example of purely mechanical treatment of an instrument, the Suite “1922” op.26 for piano could be mentioned:

In contrast to expressionism's agonizing choices of pitch movements, Hindemith's harmonies are dictated by the contingencies of the instrument's physical structure. In the exuberant cascade of notes that opens the Ragtime, for example, the left hand plays only black

³⁶ Tully Potter, "Crusading composer for viola," *The Strad* 106, no. 1267 (1995): 1120-25.

notes and the right hand only white ones. (The opposite occurs in measure 8.) Thus, a material, instead of ideal, consideration dictates the choice of tone collections.³⁷

The mechanical concept as a philosophical idea can be connected to Hindemith's interest in *Gebrauchsmusik*; to the materialistic nature of his theories, rooted in the physical rather than an abstract world. The knowledge of the instrumental mechanics results in Hindemith's idiomatic writing and playability of his instrumental compositions. All three concepts are bound together in the process of music-making; but the mechanical concept played a more important role in Hindemith's music than in music of many other composers.

String instruments and the viola in particular were influential for Hindemith's compositional technique and his theories. First of all, he was a performer of his own compositions so his approach to composition had a practical component. That gives both freedom and limitations: as a performer he would be able to visualize how music can be played without touching the instrument, and as a composer he needed to consider his capabilities as a performer. This connection between composing and performance practice results in Hindemith's incredible speed of composing, and in the idiomatic writing for viola or other instruments he could play. Hindemith himself was aware that his training as a performer was affecting his writing. When Igor Stravinsky once asked if it is a bad thing that he wants to write a concert for violin but he never played violin, Hindemith replied that it is actually a good thing because his ideas would not be affected by "routine technique" and "familiar movements of the fingers."³⁸ Hindemith's compositions sound ordinary, in terms of techniques used. He is not trying to expand colors and effects of the instrument like other composers in twentieth century, and maybe

³⁷ Martin Scherzinger, "Heideggerian Thought in the Early Music of Paul Hindemith (With a Foreword to Benjamin Boretz)," *Perspectives of New Music* 43, no. 2 - 44, no. 1 (Summer, 2005 - Winter, 2006): 80-125.

³⁸ Colin Mason, "Some aspects of Hindemith's chamber music," *Music & Letters* 41, no. 2 (1960): 150.

that is the price of his performance background. The opposite side of that sacrifice is the way he was treating the instrument.

Excerpt from the Hindemith's piece as it appears in an article:

Ex. II.
Ein wenig vorangehen.



The image shows a musical score for Hindemith's piece, Ex. II. Ein wenig vorangehen. The score is in 4/4 time and consists of three systems of two staves each (treble and bass clef). The first system includes dynamic markings 'mp' and 'mf'. The second system ends with a repeat sign. The third system ends with '&c'.

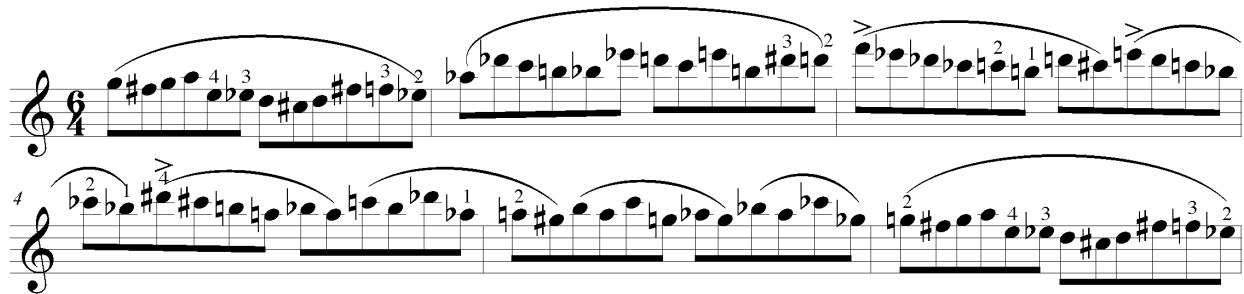
In reference to compositions for other instruments, an article “Strong Meat For Babies” by Dr. Harvey Grace, editor of the *Musical Times*, is notable. Grace, better known as *Feste*, violently criticizes contemporary compositions for young musicians using as examples pieces by Stravinsky, Jarnach, Toch, and Hindemith, as too challenging for developing musicians. Grace was an organist, choral conductor, and composer himself. The following excerpt from Hindemith's piece

certainly does not look easy and the fingering options are not as obvious as they probably should be in the music for beginners. This piece would be hard for sight-reading as it forces the performer to find the right fingerings first. The contrapuntal lines require stretching and independence of the left and right hands. However, in Hindemith's defense, I would point out that the level of young musicians could vary significantly; that the pieces like this are like puzzles that can be solved with a great satisfaction, and that the music of Hindemith would give an example of new sonorities to young musicians, and would prepare them for much harder piano pieces by Hindemith's contemporaries.

Szigeti in his book *Szigeti on the violin* mentions Hindemith's *Saitenwechsel* (change of strings) Exercise from the *Studies for Violinists* (1926).³⁹ He explains that Hindemith's exercises

³⁹ Joseph Szigeti, *Szigeti on the violin* (New York: Dover Publications, 1979), 76.

force player to use a stretched left hand position with unisons on different strings, or a fifth between first and fourth fingers. Another exercise that Szigeti mentions because of its idiomatic fingering is the *Ohne Lagenwechsel durch die Lagen* (*Exercise across the position without changing the position*).⁴⁰ That exercise represents the use of an *open* left hand position, when left hand moves through different positions without shifting:



In the Foreword to the 1956 publication of these exercises, Hindemith writes, “these pieces reflect my own way of playing in past years.”

His music for viola is not easy or too comfortable to perform, but it fits extremely well for that instrument in many ways. Hindemith never exceeds the viola range to extremes, where the sound could get too unnatural. Some chords and intervals require stretching but are appropriate considering the size difference between violin and viola. Hindemith did not specify how to play his works, as he was sure that performer should understand and feel how to play his pieces. The Schott’s publication of his viola sonata does not contain a lot of fingering suggestions and the knowledge of principles of his own playing helps to find best fingering solutions.

As was mentioned before, three movements out of four has a resolution tone of C. The choice of the pitch C as a tonic for the viola sonata is not a coincidence as it is the lowest open string on viola. His earlier sonata for violin solo op.11 no.6 is written in G-minor, and his solo

⁴⁰ Szigeti, *Szigeti*, 77.

viola sonata op.25 no.1 has the pitch C as a tonic in fourth and fifth movements. Hindemith would not miss using the deep ringing sound of the open lowest string, especially in music for solo string instrument, as it gives satisfaction both technically and artistically.

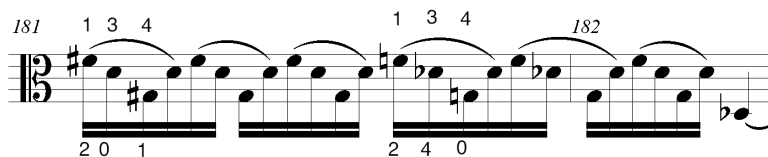
From the analysis of Hindemith's compositions it is possible to see the importance of the motives as the building material; and parallel structures such as sequence, combination of two or more motives, chords, or intervals repeated with a different level of transposition, as a common method of development. From the performer's perspective, it naturally fits to a string instrument in terms of fingerings. The most obvious fingering solution for the pattern or repeated chords of the same type would be to preserve the pattern and shift to a position where the motive can be played with the same fingers. To illustrate that fingering solution, I will use m.1 and m.5 from the first movement, where two parallel chords open the main theme:

In that case, using the same fingers for both chords, making a semi-tone shift, would not be the best solution (fingerings indicated below the staff). It could work for m.1, but in m.5 it will make the hand position too tight, the shift with all 3 fingers could affect the

intonation. Use of first or second finger for E in the m.5 in this case would be possible only with the release of third finger or breaking the chord with the release of all fingers. But applying the same fingering principle to the whole two-chord motive gives a better result (fingerings indicated above the staff). In m.1, by using the third finger for Db and F# we preserve the same position; it makes the intonation more stable. It is also easy to prepare second finger for the next chord. First finger stretches to e'', and that move on viola could be very helpful.⁴¹ In m.5, it is possible to

⁴¹ It is a common practice on violin to stretch forth finger to the higher position. On the viola it could be a good idea to use the opposite move with the first finger. It gives more relaxed hand position as the stronger finger is working.

play bass E and top note c'' of the second chord with the first finger, as it is enough time to jump with the first finger from string C to string A while breaking the chord with the right hand. The same fingerings can be used for m.6. Shifting for parallel chords is applicable in the closing material of the recapitulation in the first movement in m. 49, but it applies more often to the parallel intervals inside of the chords in mm.12, 16-18, 37, 41, and in mm.45-48 in the first movement. In the second movement this solution could be helpful in m.36: reaching Db/Bb with third and fourth fingers, and A/F with first and second fingers allows playing that bar with semi-tone shifts only. In the Coda of the third movement, in mm.103-104, it is possible to use second and fourth fingers for the major third interval, and the first finger for the bottom note. Playing F/A with second and fourth fingers on G and D strings will also emphasize the beginning of that pattern by preserving the timbre of the same strings for the whole passage. In the Passacaglia this type of fingering applies to the chords as in the first movement. The same chord which is used in a theme, arpeggiated in mm.181-182 and even if it is possible to play it in first position on two strings (fingering below the staff), it would be more logical to perform it on three strings using the same fingering pattern as before (fingering above the staff):



In mm.157-58 and mm.164-65 the following fingering pattern for double stops can be used:



The nature of string instruments allows abundant varieties of chords and double-stops and Hindemith takes into consideration how chords or double stops connect with each other within a progression. The passage of double-stops from second movement (mm.15-18) discussed earlier, and the Trio-section of the Scherzo are the examples of such thoughtful organization of series of double stops. Hindemith writes those lines in a way that it is possible to connect double stops by shifts on the same strings, by shifts with the same fingers, or by using different fingers so there is no jump of the fingers required. When strings are changing, the next double stop often could be played with free fingers, not used by the previous double stop. In chords, throughout the whole sonata, connections made smoothly also by shifts and by the use of neighbor fingers. It allows changing chords or double stops with the minimal movements of the left hand fingers. Another common device Hindemith uses to connect chords is a melodic line in top voice; it allows relaxing and preparing fingers for the next chord. Examples of that kind of connection can be found in the first movement in mm.12-14 and mm. 41-43; in the second movement in mm.6-7, 26-27; in the Passacaglia in mm. 4, 191-93. There are many examples where chords connected to each other by inner voices, and the harmony is tightly bound with the inner melodic lines within the chord progression. The effect created by such progressions gives to Hindemith's music its personal character. It would be wrong to say that the choice of harmonic progressions in this sonata predetermined by the mechanics of playing on a viola, but the link between the harmonic language and the nature of the instrument can be clearly observed.

On a melodic level, the concept of idiomatic writing applies to the structure of melodies or passages in Hindemith's music. The sequence is one of the examples of that. As was discussed earlier, the most obvious fingering solution in a sequence is to preserve the same pattern. It works not only with chords, but also with passages or melodies when the distance between

fingers preserved by the pitch content of a melody or an interval. (First movement: mm.33-35, 41; Passacaglia: mm.21-23, 26-27,31-32, 174-75, 177). Often, the feeling of a particular position is less important than the feeling of the distance between fingers (hand posture). Abundance of such patterns, and their practical application in terms of fingering suggests that they are inseparably connected with the performing practice.

4. Conclusion:

The music of Hindemith's Sonata for solo viola op.11 no.5 represents the early stage of Hindemith's individual style: a clear differentiation of themes, and the motivic nature of his music material. The presence of tonality feels stronger towards the end of the sonata. In the first movement, there are few chords or progressions that have a strong tonal value (m.10, m.14, m.18, m.25, m.43). In the second movement there is a harmonic progression in the **A**-section. In the third movement, tonal harmonies and harmonic progressions occur in every section, and especially in a trio. In the Passacaglia almost every statement ends with the cadence and many variations can be described through harmonic progressions. Individual lines within the texture often move by step progressions, which are building material not just for melodies, but also for harmonic relationships. Hindemith uses leading tones as a modulation device. The closure at the end of a phrase can act as an approach chord or a leading tone to the next phrase. In the second movement it happens twice between **a** and **b** phrases (mm.5-6, mm.25-26); in the third movement it occurs in the eighth-note motive in the half-cadence of the first section (mm.6-7, mm.79-80). In the Passacaglia, it happens in a theme (mm.4-5, mm.188-89). Such melodic treatment of a harmony makes music of this sonata unpredictable, genuine, and alive.

This sonata has its significance in the viola literature and displays new features of twentieth-century writing for string instruments. In terms of specific instrumental techniques, it remains faithful to traditions of previous centuries. Right hand techniques are represented by bariolage, broken chords or arpeggiation. There are no virtuosic strokes used, and mostly all of them are *on-the-string* strokes, but the music of this sonata is rich with fast changes in a character, dynamics, and articulation so it asks for precise bow distribution and for good bow control.

The innovation of Hindemith's sonata for viola solo is in its collection and combinations of intervals and chords. The use of the intervals of a fourth, fifth, tritone, seventh, and second as independent sonorities or inside of chords do not require special new skills from the performer, but with dissonant combinations and series of parallel chords or intervals, Hindemith expanded the vocabulary of string solo literature in the beginning of twentieth century.

The examples of the idiomatic writing in Hindemith's Sonata op.11 no.5 can be found in the choice of the tonal center for the movements; in the link to the tradition and the use of techniques presented in the Chaconne by Bach, and in the fingering patterns and idiomatic solutions for the fingerings in melodies, double stops, and chords.

IV. INSTRUMENTAL APPROACH TO THE THEORIES

1. Series 1 and 2

Hindemith as a theorist created a system, based on his own experience. His book, the *Craft of Musical Composition* (1937) is an accumulation of Hindemith's career as a teacher, performer, and composer. During his first years as a professor at Berlin Musikhochschule, he created a curriculum, which with addition of his later lectures resulted in *Craft*. It was also an attempt to defend himself as a composer from the attacks of other theorists like Schenker, Adorno, and others. One of the main points of Hindemith's theory is his denial of atonality, which is rooted in his background as a performer.

Hindemith introduces his theory with the formation of the chromatic scale based on overtones. An overtone is a phenomenon that can be experienced on a string instrument easily just by playing natural harmonics. By sliding over the string and barely touching it, we can get the series of harmonics in places where the finger divides the string proportionally (1/2, 2/3, 3/4, etc.) that coincide with the series of overtones. In ancient Greece, the Pythagorean system used simple proportions for scale formation. This system was in use before equal temperament in keyboard instruments were introduced during the Bach's lifetime. Hindemith based the chromatic scale formation on the overtones of a scientific C (64 Hz).⁴² The chromatic scale, produced by Hindemith, is not tempered, and it should not be – it is based on a parental tone and it represents the hierarchy of the tones derived from a parent tone.

The first step in the derivation of the tones in his *Serie I* is to find the closest tone *G* through the common overtone *g*:



⁴² In a more common concert pitch of A=440Hz, that C would be equal to 66Hz.

The second overtone of C is G and if we reinterpret it as the first overtone of another note, we will get a G an octave lower. The next example shows natural harmonics played on cello:



In the first bar, the fifth-harmonic on the C-string will produce the note G; it is almost the same pitch as an

octave-harmonic on string G. Natural harmonics played on a bowed instrument sound lower as the string is not perfectly flexible and the weight of the bow is applied to the string; however, it illustrates the process for scale derivation applicable to the string instrument. The other tones are produced the same way: first by finding the next common overtone closest to the overtone of the original C; and then by finding the closest common overtone of the closest tone found after C. (For example, F is produced by the third overtone of C, which can be reinterpreted as the second overtone of F; D produced by the second overtone of G, when it reinterpreted as the third overtone of D).

Series 1:

Hz: C:64 C:128 G:192 F:85,33 A:106,66 E:80 Eb:76,8 Ab:102,4 D:72 Bb:113,78 Db:68,27 B:120 Gb:91/F#:90

“Guided by their subconscious feeling for the interval, singers and players of string and wind instruments differentiate quite sharply between large and small whole-steps and half-steps. So long as they stay within the scale derived from a single fundamental generating tone... they produce ... intervals according to our model series.”⁴³

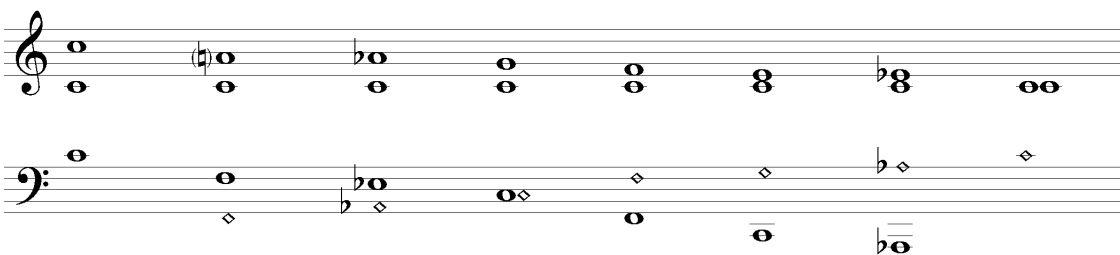
Another natural phenomenon that Hindemith uses as the basis for his theory is the combination tone. A combination tone, or difference tone, is the physiological phenomenon

⁴³ Paul Hindemith, Arthur Mendel, and Otto Ortmann, *The Craft of Musical Composition* (New York: Associated Music Publishers, 1941), 26-52.

discovered by Tartini as early as in 1714, and discussed later in works of Leopold Mozart (1756) and Pierre Bailot (1834).⁴⁴ It is a phenomenon when two pitches, sounding simultaneously, gives a result of a third tone, that is equal to the exact difference of the two frequencies. Not only violinists discussed combination tones; George Joseph Vogler (1749-1814) used knowledge of this phenomenon for creating a portable organ, where two smaller pipes produced the resultant bass.

Double stops on the violin or viola in a proper range give evidence of combination tones instantly to the ear of the performer. It can be assumed if Hindemith had not played a string instrument, most probably he would not emphasize the value of the combination tone in his theory. He had experienced combination tones before he started composing music, before he studied acoustics and music theories. He applied Guiseppe Tartini's idea of using combination tones in music theory on a new level, based on contemporary knowledge of acoustic and psychophysiology discussed in the works of Gerhard Vieth and Hermann von Helmholtz.

Combination tones produced by intervals (small noteheads represent combination tones of second order):



Hindemith uses combination tones as a determination of interval roots and to introduce *Series 2*, which organizes intervals in order of their harmonic value:



⁴⁴ Robin Stowell, *Violin technique and performance practice in the late eighteenth and early nineteenth centuries* (Cambridge [Cambridgeshire]: Cambridge University Press, 1985), 147.

2. Intervallic content

Hindemith's innovation is to approach chord analysis through the interval content. The root of the chord is found through the combination tone of the strongest interval in a chord. The inception of this idea could evolve from the performance practice of Hindemith as a string player. Bowed string instruments have unique possibilities for playing chords. String instruments with the rounded bridge makes it impossible to play all notes of the chord in a same way as it would be played on a keyboard instrument. On the other hand, the ability to play intervals and connect strings to play chords differs string instruments from other melodic instruments like wind instruments. There are various techniques of playing chords on string instruments. Three or four note chords could be played as a broken chord consisting of two double stops. With three-note chord it is possible to play all three pitches in the same time by placing the bow closer to the fingerboard (where the curve between string levels smoothens, and strings have more flexibility and amplitude), and applying enough weight to touch all 3 strings. When practicing chords, string players divide them by intervals and tune all intervals inside the chord. It is natural to listen for a root or strongest interval and adjust other intervals according to the intervallic content of the chord. A similar process occurs in an ensemble like a string quartet, where players tune to each other to reach the most convincing sonorities of the four-part texture. Thus, the interval becomes a measure and a component for the chords.

3. Melody

Hindemith's harmonic language is tightly bound with melody. In *Craft*, Hindemith emphasizes the role of melodic lines inside the harmony. He writes the whole chapter on the theory of melody and discusses the importance of the melody degree-progressions and step-

progressions in the compositional process. As we have discussed earlier, step-progressions have a strong connection to the idiomatic writing of Hindemith; and in the Solo Sonata op.11 no.5 it is specifically related with the use of motives in a sequence and with the structure of the passages. The interval is not just a harmonic content of a chord, it is also the building material for a melody; and any succession of intervals will create a chordal association and will result in tonal relationships within the melody. He mentions the physical nature of the tension of intervals in a melody, related to singing, or playing an instrument: "... when the energy of the performer gathers impulse, and the fact that a certain space has to be traversed and a certain physical resistance overcome frees that energy..." Another connection between the melody and idiomatic writing is in the motivic content of the melody, or the structure of the melody. It is possible to divide many passages in Hindemith's music according to positions, when the smaller parts of the passage would be played in different positions, especially when the repeating fingering patterns occur in different positions.

CONCLUSION

The music, the theory, and the life of Paul Hindemith reflect his personality as a practical musician. His performance career was inseparably connected with his compositions, as he always had the practical goal for his music: to be performed by himself, by his colleagues, or just by anyone. His career as a performer and a quartet musician influenced his theories, as he developed his ideas based on physical principles of the playing on an instrument. Furthermore, his abilities as a violin and a viola player, affected his music in different ways. First, he wrote a fair amount of compositions for string instruments. Second, the analysis of his Sonata for viola solo op.11 no.5 allowed us to examine and express the principles of idiomatic writing. Repetitive patterns of motives, such as sequences, represent a simple step or degree progressions, and could be played with the same fingerings.

Hindemith's theories are based not on abstract ideas but on rules of acoustics and perception. He tried to break some of the postulates of classic harmony using the idea of an overtone as a basis for a chromatic scale, while building on his own experience with the instrument. His system is not "bulletproof" by any means. It was criticized during and after his life as his own rules contradict too often with the music he wrote. For many theorists his analysis of pieces has left more questions than answers. William Thomson says, "His work is more the elaborate testimonial of a learned and gifted musician than it is the carefully wrought and documented statement of the patient scientist. ... It is my opinion that his fundamental error lies in his perpetuation of the one-sidedly 'physical' conception of tonal mechanics."⁴⁵ However, there is great amount of positive output in Hindemith's ideas. His understanding of chords as the sum of intervals is getting close to the later concept of *intervallic content* by Howard Hanson, as

⁴⁵ William Thomson, "Hindemith's Contribution to Music Theory," *Journal of Music Theory* 9, no.1, (1965): 52-71.

it appears in his book *Harmonic Materials of Modern Music* (1960). Hindemith was the first to classify chords by its tension with his concept of *harmonic fluctuation*. His *root theory* opened doors to further analysis of non-tertian chords. We can see that the intervallic content of the chords related with his theory of combination tones and overtones as the roots for the intervals and also with his performer's approach to playing chords on a string instrument. His ideas about chromatic scale, intervals, harmony, and melody have practical application to string instruments and logically derive from his background of a wonderful instrumentalist and a great musician.

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