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-Focusing on Sevcik, Flesch, Galamian, and Sassmannshaus

This work and its defense approved by:

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Violin Scale Books from Late Nineteenth-Century to the Present

- Focusing on Sevcik, Flesch, Galamian, and Sassmannshaus

A document submitted to the
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in Violin Performance

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by
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ABSTRACT

Violinists usually start practice sessions with scale books, and they know the importance of them as a technical grounding. However, performers and students generally have little information on how scale books have been developed and what details are different among many scale books. An understanding of such differences, gained through the identification and comparison of scale books, can help each violinist and teacher approach each scale book more intelligently. This document offers historical and practical information for some of the more widely used basic scale studies in violin playing.

Pedagogical materials for violin, responding to the technical demands and musical trends of the instrument**,** have increased in number. Among them, I will examine and compare the contributions to the scale book genre by three major teachers, chosen because their works are the staples in standard violin technique learning, and frequently required for international violin competitions and graduate school admission scale tests. Many other scale systems coordinate basic concepts from the scale systems by Otakar Ševčík, Carl Flesch, and Ivan Galamian. The scale books by Flesch (1873-1928) and Galamian (1903-1981), published in the twentieth-century, are currently regarded as the most prevalent and essential text books. The book by Ševčík (1852-1934), published around the turn of the century, revealing the use of tonal practices from the nineteenth-century, helped found the scale technique movement and served as the basis for other books. Along with these three, Kurt Sassmannshaus (1953-) is worthy of being considered a future contributor to this canon with his violin scale book. Sassmannshaus's

method is the first that also includes a comprehensive multimedia web site. The scale books of the above four teachers are important for understanding the development of the scale book from the late nineteenth-century to the present.

This document will present how Ševčík, Flesch, Galamian, and Sassmannshaus influenced and modified the demand for twentieth-century techniques and how they approached the fundamental technique problems. I will begin my document with a short background of the aforementioned authors for understanding their personality and philosophy. Second, I will compare similar and different aspects among their books in terms of contents, organizing, fingering, and practical guides. Finally, I will suggest guidelines for performers and students for the effective use of the scale system for each person. I will include musical examples to support any statement made by four teachers for clarification, which will give an idea of the inner logic to each of the methods. Such a course will simplify technical problems and help violinists concentrate for the next step of interpretation.

ACKNOWLEDGEMENT

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I am especially grateful to my family for their love and support. Most of all to my parents and my husband who have enabled me to get where I am today.

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I. INTRODUCTION

Violinists usually start practice sessions with scale books, and they know the importance of them as a technical grounding. However, performers and students generally have little information on how scale books have been developed and what details are different among many scale books. An understanding of such differences, gained through the identification and comparison of scale books, can help each violinist and teacher approach each scale book more intelligently. This document offers historical and practical information for some of the more widely used basic scale studies in violin playing.

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considered a future contributor to this canon with his violin scale book. Sassmannshaus's method is the first that also includes a comprehensive multimedia web site. The scale books of the above four teachers are important for understanding the development of the scale book from the late nineteenth-century to the present.

Before the appearance of Ševčík's method, students were not taught techniques with any real method.[1] He alone reconstructed the whole approach to the technique of the violin, and the majority of his treatises are comprised of mechanical exercises for the left hand. His conception and application of the technical method resulted in many followers, and violin players still use his books today. Flesch attempted to organize many technical elements such as scales, arpeggios, and double stops systematically, influenced by Ševčík's logical approach. Galamian's book is an extension of the Flesch method; it expands the available study material. For example, Galamian extends scales from three octaves to four and the harmonic and melodic forms of minor keys are dealt with separately. However, with his *Contemporary Violin Techniques,*[2] it also covers the unusual techniques of twentieth-century music and uses a scale system to introduce bowing styles and rhythms. Sassmannshaus is considered one of today's preeminent violin pedagogues as a conductor of the renowned Starling Chamber Orchestra and as a celebrated teacher of the Starling Preparatory String Project and the University of Cincinnati. His yet-to-be-published book, *Kurt Sassmannshaus Violin Master Class,*[3] covers basic techniques at all levels and considers their practical uses. He is also the

[1] M. Montagu-Nathan, "Ottakar Ševčík," *The Musical Times* vol.75 no.1093 (March 1934): 217.

[2] Ivan Galamian and Frederick Neumann, *Contemporary Violin Technique* (New York: Galaxy Music Corporation, 1963).

[3] Kurt Sassmannshaus, *Kurt Sassmannshaus Violin Master Class,* Unpublished, 2006.

author of violinmasterclass.com, a comprehensive website that demonstrates his innovative teaching methods.

Ševčík, Flesch, Galamian, and Sassmannshaus have all raised the art of violin teaching to new heights, both technically and pedagogically. While recent books naturally reflect more complex developments of modern violin techniques, violinists still use these four books today. Since each possesses distinctively different advantages, teachers and students can select and apply the advantages that are best suited to each individual's physical abilities. However, this must be based on a thorough understanding of the basic principles of each volume.

This document will provide a brief history of violin scale books from the nineteenth-century to the present through the comparison of the overall contents by Ševčík, Flesch, Galamian, and Sassmannshaus. Although the basic ingredients of left-hand and right-hand techniques are equally important, I will focus specifically on the left-hand techniques of scales and arpeggios. Then, I will observe what differences there are among the books and how scale books have developed to meet the demands of different types of music today. Through this study, pertinent questions can be answered: which book is more practical and easier to learn from? What fingering pattern is more practical in different pieces? What contents are added in comparison with the previous books? How do the four teachers deal with common content? Finally, I plan to give guidelines on how to apply the exercises to the performers and students in practicing. As a performer, I hope this document will lead to a better understanding of scale exercise systems and give ideas for contemporary violin techniques, which will in turn provide interesting and profitable results for both teacher and student.

II. Short biographical sketch emphasis on the pedagogical status and review of related works.

1. Ševčík (1852-1934)

"Ševčík seems to have been the first to realize that the practicing of difficult passages as they presented themselves simply would not do."[4] Ševčík, a Czech violinist and pedagogue, compiled a complete vocabulary of the language of the violin and employed it in short, formal exercises. While Ševčík was studying at the Prague Conservatoire, he was dissatisfied with the adopted methods and started to make his own system of instruction.[5] From a given set of exercises in his method, performers can master difficult passages. Ševčík divided his practical method of preparation into segments that help the left-hand fingers get accustomed to every combination of grouping formations, and then applied these segments to all 24 major and minor scales in his *Scales and Arpeggios*. His preliminary S*tudies of Change of Position*, *Opus 8*,[6] as well as the second and ninth books of his *School of Violin Technique*,[7] provide excellent study material. Op. 2 is the "School of Bowing Techniques," consisting of four thousand exercises in bowing, systematically graded from the most simplified patterns to the complete mastering of the right hand. Op. 9 contains preparatory studies in double stopping in thirds, sixths, octaves and tenths. In this manner, students get the secure techniques they need.

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[4] Montagu-Nathan, 217.

[5]Wallace Ritchie, *Advice to Violin Students* (London: Reeves, 1913), 31.

[6] Otakar Ševčík, *Studies of Change of Position, Opus 8*(London W.: Bosworth & Co LTD., 1911).

[7] Ševčík, *School of Bowing Technic: op.2* (New York: G. Schirmer, 1918); *Preparatory Exercises in Double-Stopping, in Thirds, Sixths, Octaves and Tenths, for the Violin, op. 9* (New York, G.Schirmer, 1905).

Opinions of Ševčík's studies are mixed. According to violinist Henry Joachim, "Ševčík's obsessive reliance on technique without musical value has been criticized by many celebrated teachers, but it is worthy for the technique foundation."[8] Musicologist Hans Keller agrees, regarding Ševčík as "the single-minded father of the isolation of violin technique."[9] After Ševčík's series of studies appeared, his influences on analyzing the elements of technique could be found in "etudes by Schradieck and Sauret, as well as those of Petri, Hubay, Sitt, Spiering, and Auer."[10] Wallace Ritchie, a violin teacher, strongly recommends Ševčík's studies and says they are "the most complete and perfect system the world has yet seen and is without doubt a means whereby the very highest degree of technique can be attained."[11] Carl Flesch described Ševčík's semitone system as a time-saving method towards developing adequate technical facility when "semitone systems are used in the right way."[12] Thus, Flesch felt Ševčík's method to be "a medicine which, according to the size of its doses, kills or cures."[13]

2. Carl Flesch (1873-1944)

Carl Flesch, born in Hungary, received his principle violin training from Professor P.M. Marsick at the Paris Conservatory from 1890 to 1894. Soon, Flesch's reputation as

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[8] Henry Joachim, "Otakar Ševčík: His Spirit and Teaching." *The Musical Times* vol.72 no.1055 (Jan. 1931): 26.

[9] Hans Keller, *The Book of the Violin*, ed. Dominic Gill, (New York: Rizzoli, 1984), 154.

[10] Carl Flesch, *The Art of Violin Playings* , 2nd ed., 2 vols., trans. Frederick Martens (New York: Carl Fischer, 1939), 114.

[11] Ritchie, 2.

[12] Flesch, 116.

[13] Ibid., 115.

an internationally renowned teacher surpassed even his reputation as a superb performing artist. His treatise, *The Art of Violin Playing*,[14] a two volume work published in Berlin in 1923 and 1928, was translated into English, Italian, Polish and Russian. It remains "a highly respected fundamental technical and artistic guide and represents a synthesis of the various schools which formed the mainstream of violin teaching in the nineteenth and early twentieth centuries."[15]

The Art of Violin Playing is a complete encyclopedia of violin playing. Flesch divides this book into three interrelated elements: technique in general, applied technique, and artistic realization. As a supplement to Book 1 of *The Art of Violin Playing, Scale System* was written in 1926. It broke new ground in the approach to fundamental matters of left-hand technique and was designed to be assimilated into performance at a faster rate than Ševčík's. Flesch tried to connect music and technique, as opposed to Ševčík's drier exercises, and regarded his work as "highly musical observations of the violinist's range of expression."[16]

Flesch's *Violin Fingering: Its Theory and Practice*[17] shows a very personal view with his fingering choices. However, through analysis of fingering problems that consider affected elements such as clarity and simplicity, he suggested his best fingering. It covers many examples of fingering problems and solutions from both solo and chamber music.

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[14] Carl Flesch, *The Art of Violin Playings* , 2nd ed., 2 vols., trans. Frederick Martens (New York: Carl Fischer, 1939).

[15] Robin Stowell, *The Pedagogical Literature* (Cambridge, New York: Cambridge University Press, 1992), 228.

[16] Keller, 154.

[17] Carl Flesch, *Violin Fingering* (New York: Da Capo Press, 1979).

Peter Lemonds transcribed violin pedagogy for the cello based on the Flesch scale system. According to Lemonds, Flesch provided a model of sequential scale practice, which is "a musically and technically fulfilling formula of scale development, an approach to acquiring and maintaining violin technique, in *Scale System*."[18] However, Robert Jacoby also points out that, using Flesch's scale fingerings that employ uniform fingering in all keys, "the irregularity of finger distances will badly affect accuracy and fluency, as well as the intonation."[19] Flesch explains that "retaining the same fingering can carry out the movement automatically in unexpected passages."[20]

3. Galamian (1903-1981)

Ivan Galamian, born in 1903 of Armenian parents, received his primary violin training at the Moscow Philharmonic Institute. He had achieved acclaim as a concert artist in Europe before emigrating to the United States in 1930. Galamian quickly analyzed and diagnosed the playing of his students and provided them with proper solutions. His famous pupils include: violinists Itzhak Perlman, Pinchas Zuckerman, Kyung-Wha Chung and distinguished teacher Dorothy Delay.

Galamian's method illustrates the mental control and physical actions necessary for violin playing. For example, he suggests playing scales while physically anticipating the sound and the motion ahead with a picture of clarity and precision: "It means that the mind always has to anticipate the physical action that is to be taken and then to send the

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[18] Peter Whitlock Lemonds, "The Carl Flesch violin scale system: an edition for cello." *MissouriJournal of Research in Music Education* vol.5 no.1 (1982): 127.

[19] Robert Jacoby, *Violin Technique: A Practical Analysis for Performers* (Borough Green, Sevenoaks, Kent: Novello, 1985), 70.

[20] Flesch, 40.

command for its execution."[21] This is his special method which shows his preference for "control of mind over muscle than mere agility of fingers." [22] He recommended the understanding of the organic relationship between the mental and the technical. In explaining technique in his *Principles of Violin Playing & Teaching*[23] he continues to connect this relationship. It does not cover the subject more extensively than Flesch's *The Art of Violin Playing* but is still a valuable addition to violin literature as the guidance of a wise and experienced teacher. The various chapters deal with interpretation, left-hand and right- hand technique, and practicing. After Galamian's emphasis on the mental aspect, Kato Hava's *New Approach to Violin Playing* (1964) represents the abstract approach: "through a relaxed control and co-coordination from the elimination of all the existing obstacles, both physical and mental, the player may be able to make good results."[24]

Dorothy Delay, who served as Mr. Galamian's top assistant for many years, tells of his system as a "determination to make things happen and then to induce them to work well."[25] Galamian's *Contemporary Violin Technique* is intended to present a method of study covering the essential elements of contemporary violin technique as it had developed up to that time. The book features extended techniques responding to the new

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[21] Ivan Galamian, *Principle of Violin Playing and Teaching* (Englewood Cliffs, NJ: Prentice-Hall, Inc., 1962), 95.

[22] Galamian and Neumann, ii.

[23] Ivan Galamian*, Principle of Violin Playing and Teaching* (Englewood Cliffs, NJ: Prentice-Hall, Inc., 1962).

[24] K. Havas, *The Twelve Lesson Course in a New Approach to Violin Playing* (London, 1964), 3.

[25] Barbara Lourie, *Teaching Genius: Dorothy DeLay and the Making of a Musician* (Portland, OR: Amadeus Press, 2000), 49.

demands that had evolved by the mid-20th century and gives ideas for practicing. Galamian's famous 24-note form was one of the trademarks of his teaching:

> It could be evenly divided into 2, 3, 4, 6, 8, or 12 notes-per-bow or notes-per-beat. Later, the number of notes on consecutive beats was varied . . . Add to this the many rhythms for the fingers of the left hand and the many bowing patterns, and the student has an infinite number of ways to practice not only the scale itself but also any annoying passage in the repertoire.[26]

In his lessons, he emphasized "Practice means repetition, but repetition means monotony."[27] Therefore, "repetition must be accompanied by variety, and the variety must be challenging enough to entice the mind to stay active."[28] In the case of advanced students, they can create new and more difficult combinations of rhythms and bowings based on his suggestions in his exercises. Consequently, while practicing, whether on an etude or bothersome passage in the repertoire, the whole general level of the playing could achieve new heights. With Galamian, "an etude is not just a piece of music to be learned. Instead, it becomes a vehicle for building a whole mass of pertinent techniques."[29] Violinist Suzanne Rozsa wrote "Flesch's work could indeed be called the violinist's bible. Galamian's book in comparison is a kind of digest."[30] Galamian's book provides aspects of his teaching and ideas. "Ivan Galamian was recognized as the strong twentieth-century link in the historical chain of world-famous violinists and teachers whose lives carried forward (and gradually improved) the 300-year tradition of top-level

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[26] Galamian, 105.

[27] Lourie, 48.

[28] Green, 99.

[29] Ibid., 94.

[30] Suzanne Rozsa, "Rules of Violin Playing and Teaching by Ivan Galamian," *Tempo* 71 (Winter 1964): 35.

violin performance."[31] His ideas were organized sequentially and clearly demonstrated in his 24-note form.

4. Kurt Sassmannshaus

Kurt Sassmannshaus has been chairman of the String Department at the University of Cincinnati College-Conservatory of Music since 1984. In addition to teaching conservatory students, Sassmannshaus is renowned for his method of training younger players with extraordinary talent. His website, violinmasterclass.com, was created "for violin professionals, teachers, parents, and students at all levels to enhance the study of playing the violin."[32] He received his Master's degree from the Juilliard School, where he was a student of Dorothy DeLay. Because Delay was a pupil of Galamian, Sassmannshaus is influenced by the Galamian method. He has a scale study method covering much of the same material using the 24 form for scale exercise and incorporating some of the same bowing exercises as Galamian, but his approach is easier and clearer. In his unpublished book and website, both entitled *Violin Master Class,* he presents the definition of each element, shows how to practice it and suggests its application to concert repertoire. While Flesch and Galamian explain all the elements required in their violin exercises, Sassmannshaus indicates how the student will be developed through the implementation of sequentially prepared lessons. Both the book and website of *Violin Master Class* explains methods in English and German and illustrates his step-by-step approach and practical organization gained from his teaching

[31] Elizabeth A. H. Green, *Miraculous Teacher: Ivan Galamian* (Bryn Mawr, PA: Theodore Presser, 1993), 7.

[32]"About Us," *Violin Masterclass: The Sassmannshaus Tradition for Violin Playing,* 17 September 2004, <http://www.violinmasterclass.com/aboutus.php> (January 20 2006).

experience. For example, Sassmannshaus includes fundamental exercises such as finger dropping, shifting, and string crossing patterns separately, which coordinate to form the scales and arpeggio exercises. Though Galamian incorporates the rhythm and bowing exercises into scales, students rarely use them due to the inconvenience of having to use a separate book with bowing and rhythmic options. Thus, Sassmannshaus organizes a book which can present basic systems that incorporate the various patterns in one source. His community site also helps find solutions to problems and answers questions submitted by users. Bernd Enders said that technology already impacts cultural and artistic perspectives and people have to consider these transformations. He recommends "integrating technology into our general educational goals by experience interaction (with computer based systems of all kinds), communication (through international networks) and simulation (of processes, environments and communities)."[33] Sassmannshaus is a teacher who utilizes music technologies in order to set new goals for musical education.

III. Comparison of the four major scale books and their practice methods

Baillot describes scale exercises in his *The Art of the Violin* as "practice of these formulated studies as being to the art of the violin what vocalization is to the art of singing."[34] I will compare both the similar and different aspects of the Ševčík, Flesch, Galamian, and Sassmannshaus books in terms of contents, organizing, fingering, and practical guides. Then, I will suggest guidelines for both performers and students for the effective use of the scale system for each individual.

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[33] Bernd Enders, *Music and Technology in the Twentieth Century*, ed. Hans-Joachim Braum, (Baltimore: John Hopkins University Press, 2002), 236.

[34]Pierre Marie Francois de Sales Baillot, *The Art of the Violin*. Edit and trans. Louise Goldberg (Evanston, Illinois: Northwestern University Press, 1991): 45.

1. Contents

Ševčík presents twenty-four major and minor one-octave scales, two-octave scales for each position up to the fifth, and three-octave scales. Both two and three octave arpeggios, broken thirds, and chromatics are presented in all keys. While Flesch only deals with a three-octave scale system, Ševčík covers from first position octaves to more extensive three-octave scales which could serve as a preparatory study for Flesch's book. Three octaves scales are dealt with in no. 33 and no.36 of Ševčík's. Because Ševčík's scale book is compiled from many of his different works, it includes superfluous sections. For example, Nos. 33-35 are for 'Scales throughout three octaves' and No.37 for 'Scales over three octaves'; both of these exercises have the same content. Even the strongest supporter of Ševčík's method, Wallace Ritchie, noted that this method is not suitable for everyone, "especially those who have but a very limited time for practice and those whose enthusiasm is but a minor quantity." [35] Ševčík shows a couple of examples in his rhythmic exercises, which have only three of four note groupings. It is very restricted in number compared to Galamian's book, but the incorporation of scales with rhythmic exercises was very new in the nineteenth century.

Flesch's innovations in comparison to Ševčík's include a few exercises in double stop harmonics and various nuances to the scales and chord progressions. It is recommended to adapt the dynamics in the given examples only after developing basic techniques. These dynamics include *piano subito*, *forte subito*, the alternating swells of crescendos and decrescendos: < > or > < , and so on; these are important for the study of musical tone. Flesch also explained in his scale book that "In order to use the time at one's disposal for the System of Scales to utmost advantage, I have combined the simple

[35] Ritchie, 2.

scales with bowing exercises." In his *Art of Playing Violin,* he states that "the system of scales may be used for applied technique."[36] However, Flesch shows only a few combinations of bow strokes and rhythmic patterns with the scales exercises. His tenths, artificial harmonics, and double harmonics are weak in terms of content. With single harmonics, Flesch uses only the normal position using fourth fingering and the exercises dealing with double harmonics consists only of five measures for each key. In his *Violin Fingering,* he does not mention anything about double harmonics and for those who have special interests in harmonic subjects, he recommends that they refer to the *Schule des Flageolettspiels* by Richard Hofmann.[37]

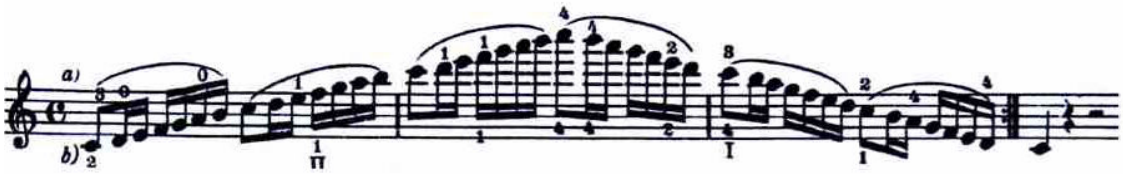
Regarding Galamian's book, there are many new concepts that expand violin technique to reflect contemporary music practice. He starts with the one octave scale, utilizing the change of positions with an average scale exercise. Galamian extends the scales from three to four octaves and deals with the harmonic and melodic forms of the minor keys separately. In keeping with twentieth-century trends, a technique of extension and contraction gradually replaced the many unnecessary shifts throughout his scale and arpeggios exercises. He added broken fourths, fifths and sixths, which naturally leads to the double stop of the tenth. For double stops, he includes unisons, fourths, fifths, and sevenths. In addition, whole-tone scales and a few non-traditional scales, used in the twentieth century, have been added. In terms of double stops, he presents exercises with chromatic minor and major double stops, whole-tone scales, alternating double stops with open strings, and extensions. Triple and quadruple stops are also included in his book.

[36] Flesch, The Art of Violin Playing, 113.

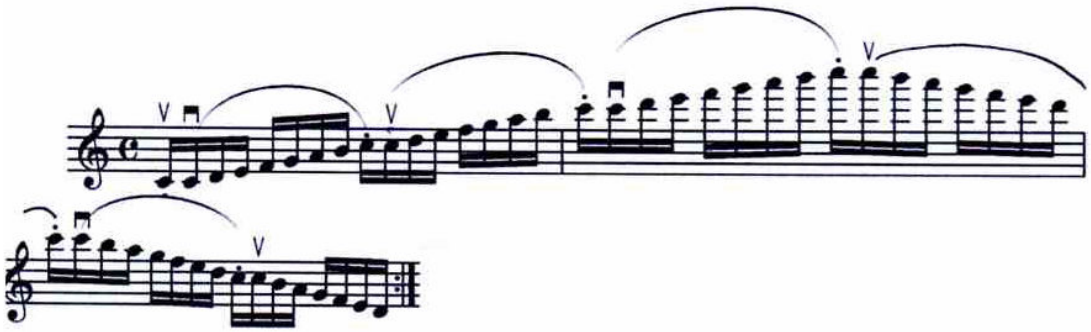
[37] Flesch, Violin Fingering, 375.

Galamian incorporated rhythmic and bowing exercises into scales, which was made possible due to his 24 form scale routines. In his scale, the notes are printed as unstemmed heads to facilitate the use of bowing and rhythmic variants. He presents innumerable combinations of bowing and rhythmic patterns in a separate book. With his addition of several notes at the beginning and end of the scale, the change of the top note occurs on the strong beat in the middle of the scale; this enables one to facilitate the variable rhythmic exercises, proceeding to the next routine using a constant bow speed. 48 notes can be played as 2, 3, 4, 6, 8, 12, 16, and 24 notes per bow. The seemingly small change with the addition of a few notes greatly affects the coordination of the two hands. Ševčík uses an irregular rhythm pattern in his scale system. After him, Schradieck compensates for this irregular pattern by using repeated notes for making a regular rhythmic procession. Flesch uses a triple rhythmic pattern for preserving rhythmic regularity, but the top note is not in accordance with the beat of the measure, which results in a restricted number of rhythmic groupings. Flesch did not indicate this grouping in his exercises, but violinists usually use his scale system with groupings of 3, 6, 9, 12, and 24 notes to a bow.

Ševčík

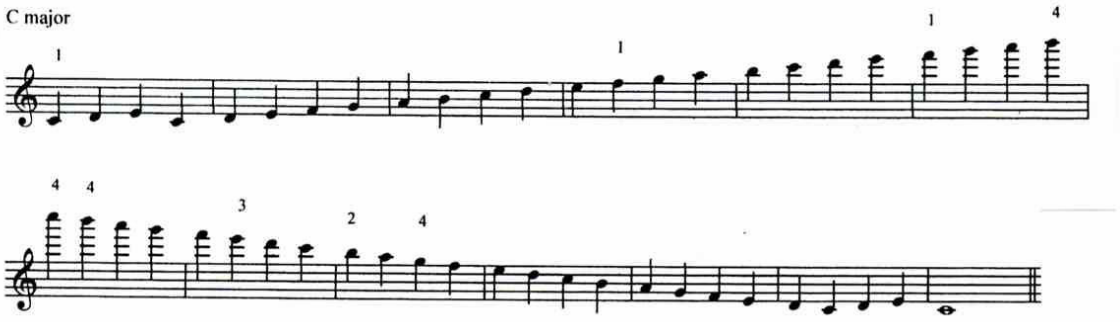


Schradieck:



Flesch:

Galamian, Sassmannshaus



In addition to the above patterns, Galamian suggests innumerable rhythmic patterns and bowings. He coordinates the two hands, dealing with the mixture of slurs and separate bows which trains bow pressure as well as bow division. He said the scale can serve as a vehicle for technical skill in either the left or right hand. ". . . Their applicability for the study of all bowings, of tone quality, bow division, of dynamics, and of vibrato is almost

endless." [38] He teaches solutions to the problems encountered in etudes and difficult passages in the repertoire; Galamian brought the scale exercise to a higher level by adding elements that made it more musical; by incorporating melodic elements into the scale, he considered the musicality of the scale rather than just the technical aspects. The Galamian scale system gives a thorough knowledge of the entire technical material which enables violinists to continue developing through self-learning. Galamian emphasizes the mental control over physical movements as the most influential factor in achieving technical mastery.

Sassmannshaus provides a clear explanation of how these exercises are to be implemented. While he excludes study material which would prepare the student for more recent music such as whole-tone scales, double harmonics and extensions (modern shifting techniques), he adds fundamental exercises such as finger dropping, shifting, and string crossing patterns separately, which coordinate(s) to form the exercises for scales and arpeggios. Robert Gerle recommends "Separate the problems and solve them one by one" for concentrating on each component(s) and for saving time.[39] Ševčík already provides these kinds of exercises with shorter patterns in his *School of Violin Technics: op. 1. Shifting the Position and Preparatory Scale-Studies: for the Violin, op. 8.* However, Sassmannshaus compacts the patterns from Ševčík's abundant exercises, which enables one to learn in a shorter time while also providing some technical security. Flesch also discusses basic studies as a shaping of a condensed extract of the technical needs of the

[38] Galamian, 102.

[39]Robert Gerle, *The Art of Practising the Violin: with Useful Hints for All String Players* (London: Stainer & Bell, 1985), 17.

violin in his *Urstudien*.[40] Regarding shifting, Sassmannshaus deals with all combinations in every position with all four left-hand fingers, from first position to eighth position, through a compact presentation using two notes. There are two kinds of shifting exercises: the first involves using the same finger and the second uses a change of finger. In the latter case, Sassmannshaus notates the intermediate note for changing to a new finger that helps students learn a clear finger motion. He explains the use of vibrato and recommends incorporating scale(s) exercises to train the execution of vibrato continuity as a sequence of equal sounding tones and also gives exercise tips for harmonics and left-hand pizzicato. In terms of right hand technique, he explains the basic bow strokes and gives suggestions relating to etude studies. Instead of excluding Galamian's introduction of double stop fourth, fifths, and sevenths, Sassmannshaus extends the double stops exercise by incorporating shifting exercises. His simplified pattern may be developed and elaborated to any extent, and the work should be done on all strings and in various keys.

Sassmannshaus intends to use his book for all levels of students classified as beginner, intermediate, and advanced; he also gives suitable advice and practicing methods for each level. His website violinmasterclass.com also progresses in the same categories, in accordance with his scale book. Possible weaknesses and errors are taken into consideration and simple rules for correct practicing are explained in detail.

2. Organization

Ševčík: Part I consists of exercises in the first position of two octaves; Part II of the scale exercises are in the second, third, fourth, and fifth positions. Part III of his

[40] Carl Flesch, *Urstudien for Violin.* (New York: Carl Fischer, Inc., 1911).

exercises span three octaves; C, G, D, A, E, B, F, B♭, E♭, A♭, D♭, G♭ and their relative minors; and Part IV of the exercises involve double- stopping and harmonics which are played in the normal way with the first and fourth finger. Ševčík's diatonic scales are to be played beginning on any scale degree of the current scale; for instance, a C Major scale should be first played through starting on C, then D, E, F, etc. The purpose of this is to ensure that the musician is aware of the pattern of tones and semi-tones through note association, not just from the set pattern of the scale as played from tonic to tonic. Galamian suggests scale exercising order as the following: 1) learning with a definite fingering pattern, starting from the tonic, 2) using different fingering, and 3) starting on notes other than the tonic. Ševčík's scales use the reverse order than Galamian. The succession of broken chords, as introduced by Ševčík in his *Violin Method*, has also been retained by Flesch in the System of Scales 'as the most practical compilation.'[41]

Flesch's scale system is organized by order of the circle of fifths: from C major, F, B♭, E♭, A♭, D♭, G♭, B, E, A, D, G, and their relative minors. However, the books by Ševčík, Galamian, and Sassmannshaus are organized by each category: scale, arpeggio, double stops, etc. Each category is then presented in all the keys. Flesch emphases the more efficient use of time in practicing and his compact organization makes it easy to review every element in one chapter: scale, arpeggio, and double stops in each key. Most violinists practice daily scale exercises with only diatonic scales and usually ignore the other technical formulas. To alleviate this problem, Flesch's book is more accessible for complete exercises. He observes the scale's practical development as "the key must be

[41] Carl Flesch, *Scale System* (New York: Carl Fischer, Inc., 1926), 3.

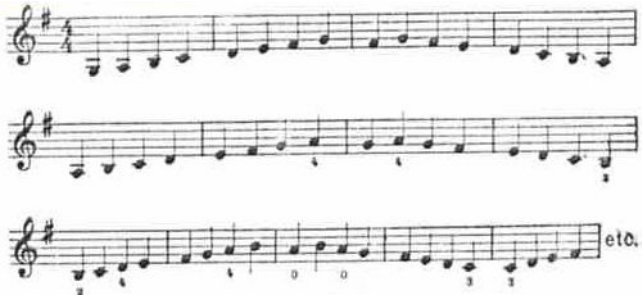
changed every day."[42] Flesch's approach is better for preserving technique rather than acquiring it. Presumably this method is intended for highly advanced violinists. Even though the Flesch scale system does not apply to beginning violin playing, it will help the student when he is ready for more advanced study.

On the other hand, the step-by-step approach of Ševčík, Galamian, and Sassmannshaus helps both performers and students to move from one level to the next naturally. Ševčík starts with one octave scales, Galamian begins with shifting exercises using finger substitution in scales, and Sassmannshaus deals with more basic finger exercises such as finger dropping. Although Ševčík, Galamian, and Sassmannshaus have differences in their concentration of particular sections, they all try to establish the feeling for position on a firm basis. The approach of Ševčík, Galamian, and Sassmanshaus seems to assume that the student is starting from a more basic level than does the approach of Flesch. However, regarding scales and arpeggio exercises, only Ševčík and Galamian have vast quantities of exercises that require plenty of time and perseverance than do Flesch and Sassmannshaus. In some cases, Sassmannshaus makes more compact studies than Flesch by excluding repeated exercises. For example, in the arpeggio section Sassmasnnshaus uses only one system of exercises for the parallel major and minor of each key.

For the indication of strings, Ševčík, Flesch, and Sassmannshaus use Roman numerals I, II, III, and IV. Galamian uses the letters E, A, D, and G indicating each string and I, II, III, and IV for position. In my experience, most students do not get confused with Galamian's markings. Ševčík and Flesch sometimes do not mark fingerings or strings, which make some things confusing or misleading to intermediate students. In

[42]Carl Flesch, *Scale System*, ii.

Galamian's scale section, most exercises are written in C Major but contain the note "Practice in all keys." Although this leaves it to the student to do the transposing himself, the majority of students study in the limited written key only. For this reason, Carl Flesch published *Scale System* transposed to all keys from one key example of *Art of Violin Playing.*[43] Because Ševčík indicates only two measures of each key system, it often causes confusion about fingering and intonation to beginners. Instead of a complete scale system, he shows examples of scale practicing. For example, in the case of the G Major scale, he starts on G then later uses A as the starting and ending point, then B, C, D, etc.



Yost explained its advantage as "In this way the student learns to begin a scale passage on any note of the scale and this facilitates passage playing and the general grasp of the finger board."[44] Galamian retains this method for scales in one position. Even though he does incorporates the rhythm and bowing exercises into scales, students rarely use them due to the inconvenience of having a separate book with bowing and rhythmic options. Thus, Sassmannshaus makes it easy to find each section and organizes a book which can present basic systems and their incorporating various patterns at one sight.

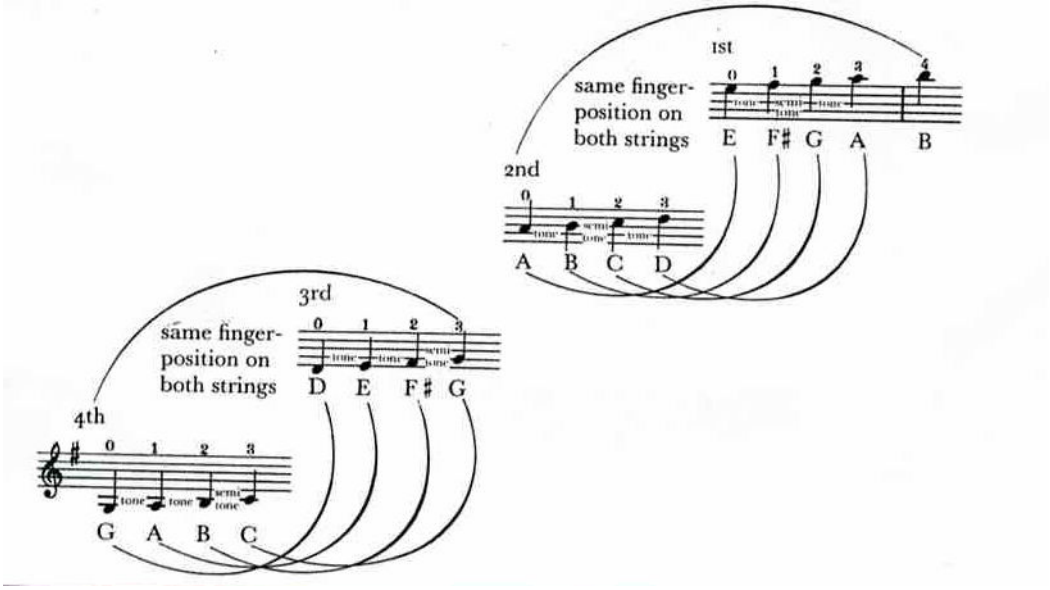
In terms of key order in the scale books, "the C major scale was commonly recommended in the eighteenth century as the initial scale for beginners to study, but G

[43]Flesch, *Scale System*, 2.

[44]Gaylord Yost, *The Yost System for Violin* (Pittsburgh, Pa.: Volkwein Bros., 1932), 2.

major gradually gained favor towards the end of the century because of its more natural distribution of the fingers to the fingerboard."[45] Following this tradition, Ševčík and Flesch follow the old style by starting with C major, in comparison with Galamian who starts with G major. Giovanni Battista Viotti explained the reason of key order:

> In the scale of G, the first and third fingers remain the same distance apart on all four strings; whereas in the scale of C, the first finger has to move back on the E string in order to play the F natural. Furthermore, in the G scale, once the fingers have been positioned on the fourth string, they remain the same distance apart to produce the notes on the third. And then, by a simple movement of the second finger, they are positioned again on the A string, remaining the same on the E string.[46]



Galamian starts the scale exercises in fingerboard order: G, A♭, A, B♭, B, . . . , which is noted by Gaylord Yost to be "the only logical order of scale practice."[47] Sassmannshaus

[45] Galamian, 259.

[46] François Antoine Habeneck, *Méthode théorique et pratique de violon* (Paris : Canaux, 1842),35.

[47] Gaylord Yost, *The Yost System for Violin: Scale and Arpeggio Studies* (Pittsburgh, PA: Volkwein Bros., 1932), 2.

also follows fingerboard order; however, he starts A♭, A, Bb, . . . ,G. Since he wants to preserve the same fingering for all major and minor scales respectively, he excludes scales starting on an open string and organizes his book by separating the scales into two categories: major and minor. "During studying, students do not have to change fingering through each category,"[48] while Galamian's scale system alternates major and minor scales for each key.

3. Fingering and Shifting

The chief objective of any fingering is good intonation, as Yampolski points out:

> The purity of violinist's intonation depends to a certain extent on his choice of fingering. A bad fingering is often the reason for uncertain and inexact intonation, even in technically easy passages. This is the result of the awkward movements of the hand and fingers which are required by such fingerings.[49]

a. Scales

Ševčík's diatonic scales have three fingerings, two of which always include the first position as the starting note. One always starts with an open G-string except where sharps and flats make it impossible to do so without considering key signature; the other starts on the tonic note of the key in first position. Besides starting the scales in the first position, Ševčík uses three sets of fingerings: the open string, the first-finger beginning, and the second-finger beginning. While Flesch uses only the tonic note of the key and starts with the second finger on the G-string, Galamian notated two fingerings placed above and below the notes, leaving the teacher or student free to choose between

[48] Sassmannshaus.

[49] Izrail M Yampolsky, *The Principles of Violin Fingering*. Trans. Alan Lumsden. (London: Oxford University Press, 1967), 5.

alternatives. Galamian's scale system starts with the first or second finger by which he tries to prepare for the exceptions that arise for musical and technical reasons.[50] Sassmannshaus only uses one fingerings for major and minor scales starting with the first finger on the G-string.

There have been several considerations for deciding on the fingering such as points of shifting and position, using of open strings for string crossing, and preserving finger regularity.

Pierre Baillot, a violinist and author of the violin method "The Art of the Violin," introduced a way of determining the fingerings. In his survey of fingerings: "It is better to shift upwards or downwards by semitones or to the positions which offer support for the hand, such as the third and first positions."[51] This method is commonly used today for shift exercises to achieve an inaudible sound between notes. However, Ševčík's method changes position frequently using the whole distance required of the shift, which makes intonation less secure and causes the need for the training of more distance measuring than the Flesch, Galamain, and Sassmannshaus scale books. The second, fourth, and sixth position is avoided whenever possible by violinists. This is understandable to some extent because "the hand has no support and is suspended in mid-air."[52] However, modern teachers agree that the even-numbered positions are equally essential to a well-developed playing technique as the odd-numbered positions. The even-numbered position offers the elimination of disagreeable stretches from the odd-numbered position. Galamian and

[50] Galamian, 36.

[51] Stowell, 91.

[52] Flesch, *Violin Fingering*, 25.

Sassmannshaus utilize more even-numbered positions in their scale exercises than does Flesch. Although Flesch emphasizes equal importance between even and odd numbered positions in his *Violin Fingering* and *Art of Playing Violin*, he always makes shifts using the third position in his scale system. In regards to the shifting fingerings, Galamian and Sassmannshaus include 2-1, 3-1, and even 4-1 shifting in an ascending scale while Flesch's upward shifts always use 2-1 shifts. Even if he introduces a shift from the third finger to the first in his *Violin Fingering,* he has previously mentioned that "In a shift from second to the first finger, the distance is a third; the third finger to the first, a fourth. Therefore, adjoining fingers should have preference."[53] However, Ševčík, Flesch, Galamian, and Sassmannshaus all follows the old tip for shifting that "The most practical and convenient manner of shifting is to skip one position in ascending as well as in descending; from the first position to the third, from the second to the fourth, from the third to the fifth and so on, and vice versa."[54]

The choice between an open string and the fourth finger is a matter of taste. Ševčík uses an open string for ascending scales and the fourth finger for descending scales. On the contrary, Flesch and Galamian use the fourth finger in ascending scales and an open string in descending scales. Sassmannshaus uses the fourth finger for both ascending and descending. Regarding the difference between use of the open string or fourth finger, Flesch said it depends on the taste of the violinist. In Ševčík's time violinists considered the open string an advantage, which coincides with the change of string on the strong beat of the measure as well as its brighter tone-color for aural

[53] Flesch*, Art of Violin Playing*, 55.

[54] Eugene Gruenberg, *Violin Teaching and Violin Study* (New York: Carl Fischer, 1965),71.

convenience. Ševčík maintained the practice of using the fourth finger only on descending passages from Campgnoli, who was an Italian violinist and teacher in the nineteenth-century.[55] Flesch recommend the fourth finger in scales because it uses the change of strings to consider tone quality as well as to coincide with a relatively strong accent.[56] Although the procedure to secure smooth changing of the string is considered from the late nineteenth-century to the present, it seems that this is not considered by Ševčík. In his scale system, the natural accents of the open strings are often heard. Flesch recommends practicing scale exercises using only the fourth finger for training purposes of the naturally weak pinkie.

Most important is to find a finger-pattern of sufficient regularity that allows clear articulations at high speeds. There are two kinds of finger-patterns to consider: the distance of the fingers and the fingering numbers. Robert Jacoby also points out that because Flesch's scale fingerings use uniformed fingering in all keys, "The irregularity of finger distances will badly affect accuracy and fluency, as well as the intonation."[57] Flesch explains that "retaining the same fingering can carry out the movement automatically in unexpected passages."[58] Thus, his fingering brings out differences in the fingering distance between major and minor scales because the half-tones appear at the different places. In the descending scales, however, the change of position is preferably carried out on the half-tones.

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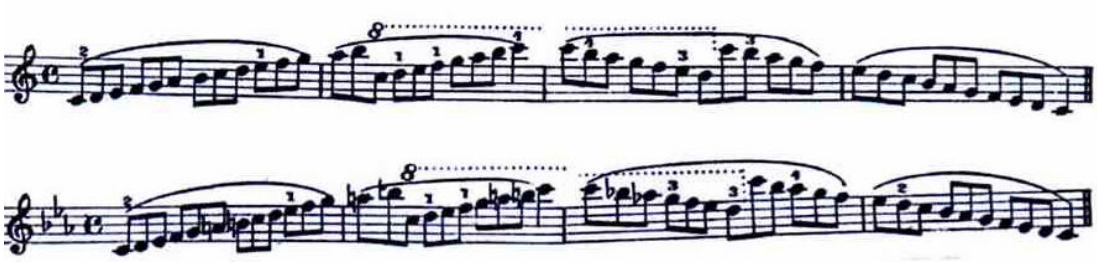
[55] M Alexandra Eddy, "American Violin Method-books and European Teachers, Geminiani to Spohr," *American Music* Vol.8, No.2 (Summer, 1990): 190.

[56] Carl Flesch, *Violin Fingering* (New York: Da Capo Press, 1979), 10.

[57] Robert Jacoby, *Violin Technique: A Practical Analysis for Performers* (Borough Green, Sevenoaks, Kent: Novello, 1985), 70.

[58] Flesch, 40.



Flesch gives preference to simplicity and disagrees with practicing scales with various fingerings. Sassmannshaus agrees with Flesch's conception by making more reasonable and practical fingerings. Sassmannshaus classifies fingering into two categories for the major and minor systems, which also makes it possible to retain the same finger distance. The same distance between fingerings allows maintenance of good intonation without special effort at great speeds. In this view, Galamian has the opposite view. He presents various fingerings but generally tends to reduce shifts movements. For example, Galamian uses extended changes of position instead of two close-lying changes of position. The violinist Gerle supported this manner: "Make one large shift rather than two small, in frequent passages. Sudden or too frequent changes of position prevent the hand from setting in any one position." [59] Flesch also agrees that reducing the change of position contributes to the smooth flow of a run.[60]

Ševčík, Flesch, Galamian, and Sassmannshaus also tried to preserve overall uniformity of fingerings, however, they have different preferences on approaching uniformity.

[59] Gerle,54.

[60] Felshc, *Violin Fingering*, 72.

b. Arpeggios (Broken Triads and Seventh Chords)

In *Art of Playing Violin* by Flesch "The best chord-sequence is unquestionably that given by Ševčík in his "School of Violin Technique," Book 3, Nos. 3 and 7."[61] Flesch praises and retains Ševčík's method of arpeggios exercises. Ševčík, Flesch, Galamian, and Sassmannshaus generally follow the older tradition of changing positions in which the same finger each time is used regularly. They all consider that "its repeated movement gives the passage a smoothness of action, which makes change position secure."[62] However, in terms of fingering in the upper position, there is difference between the instructors. There are several examples revealing nineteenth-century practice concerning triads, sevenths, and arpeggios on one string. Flesch mentioned "In Playing triads, it is most important that minor triads be played with the first, second, and fourth fingers, and major triads with the first, third, and fourth fingers."[63]

with 4, 2, 1

with 4, 3, 1

Ševčík, however, maintains the 1, 3, and 4 fingering in accordance with the old idea that "the first three fingers should always remains in position while the fourth is left to cope with any necessary extension."[64]

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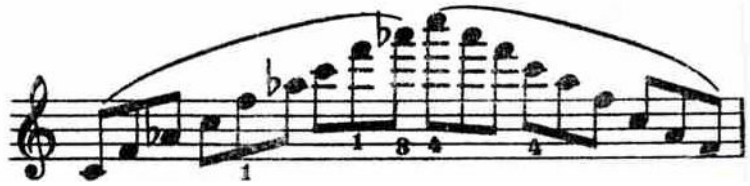
[61] Flesch, *The Art of Violin Playing*, 41.

[62] Stowell, 91.

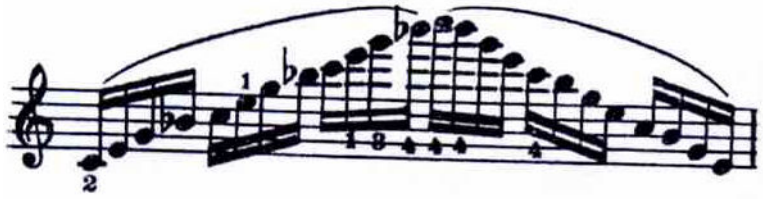
[63]Flesch, *Violin Fingering*, 67.

[64] Robert Jacoby, *Violin Technique: A Practical Analysis for Performers* (Novello & Company Limited, 1985), 40.

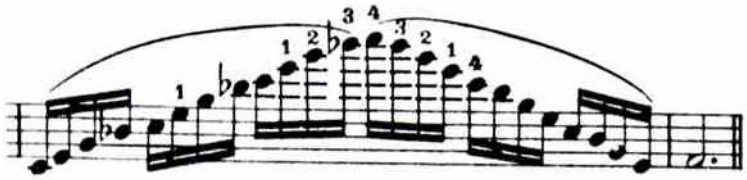


Jacoby regards Ševčík's fingering as illogical, and notes that this kind of extension will tend to result in poor intonation. Regarding the fingering in sevenths and arpeggios on one string, Ševčík again maintains the old manner in choosing a fingering:

Ševčík

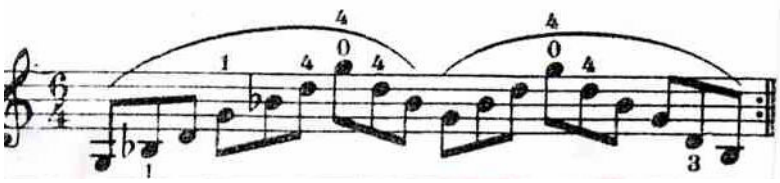


: Ševčík's awkward fingering using fifth



: Flesch's extended fingering

Ševčík sometimes uses the natural harmonics of the old method rather than a method of shifting or extension.



Flesch supports the above example: “In the days before Ševčík fourth positions were avoided by leaving the hand in the third position and only bringing the finger into the fourth position,” where it could reach the natural harmonic tone without effort or danger by stretching.[65] For example, the extension belongs to the reaching up of the fourth finger to play C on the E string in the first position or the reaching back of the first finger to play G# on the E string in the third position.

After becoming familiar with Ševčík’s studies, the violinist acquires a greater skill in the change of position with a stretching motion that lessens the vibrato which was used with increasing intensity. Most passages of Ševčík, Flesch, Galamian, and Sassmannshaus include change of position exercises. At the same time, Galamian shows many novel types of extension for avoiding change of position in variable triadic patterns on one string in two octaves.

The recent tendency, encouraged by the higher level of general skill, have enabled players to use stretching more extensively for reducing the number of audible glissandi as much as possible. Flesch did not agree with this tendency of forced and unnatural stretches since it could cause harm to the violinist and distort the shape of a steady hand position. Extensions, according to Flesch, should be utilized only when replacing shifts with could be musically or technically disturbing. In lower positions, he feels extensions should be further limited to intervals of a fifth, and used only incidentally. In higher positions larger extensions could be acceptable because of the less relative distance

[65] Flesch, *Art of Violin Playing*,47.

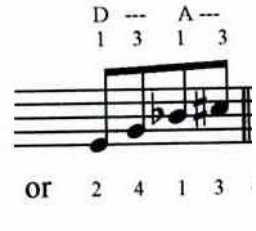
between intervals. He said that "The change of strings is definitely the lesser evil."[66] He does, however, allow exceptions for finger facilitating and in the higher positions he accepts larger extensions due to the lesser relative distance between intervals. Galamian avoids these shifts that break out of the hand frame by means of extensions and contractions, but also through the more traditional methods of using the chromatic fingering, and exchanging fingers on consecutive notes. Its proper application helps avoid unwanted string crossings and these shifts can promote facility and security in passages that would otherwise be very cumbersome.

* Half-step shifts.
\+ Extension.
\# Contraction.

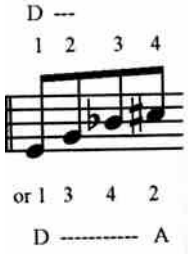
Brahms: *Concerto in D Major*, Op. 77
First movement (measures 252-55)

However, the choice between shifting to maintain hand shape and extending for economy of motion may vary due to personal hand size or condition. As an example, contracted fingerings suits small hands and extended fingerings suit large hands.

Contracted fingering



Extracted fingering



[66]Flesch, *Art of Violin Playing*, 21.

c. Broken thirds

Ševčík's exercises are only within a two octave range in the first position, in which there is no shift motion, although there is a requirement for a more frequent change of string. Sassmannshaus includes these exercises separately in his shifting section.

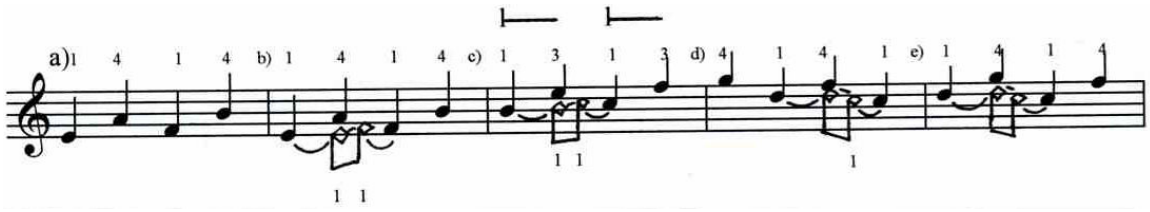
In the broken thirds exercises by Flesch and Galamian, a change of the string takes the place of the change of position for preserving the same tone color. However, there is a different fingering preference between them. Flesch feels that accurate intonation is better served by shifting the hand rather than breaking out of the fourth-setting (interval of a fourth) of the fingers. However, in his *Violin Fingerings* Flesch introduces one more fingering using "'creeping into position,' a type of change of position, which is produced by having the finger alone move into the new position first, and by having the arm follow later."[67] Flesch explains it as a way of sneaking into a new position and its advantage rests in the possibility of eliminating audible *glissandi.* His scale system, however, uses only regular shifting motion.

Galamian classified fingering developments into six steps: "1) more playing in the even-numbered positions, 2) the half step shift, 3) position change on open strings, 4) better chromatic fingerings, 5) new type of extensions outside of the frame, and 6) a new kind of fingering that is based on extensions or contractions, plus the subsequent necessary readjustment of the hand itself." [68] He refers to 'creeping fingering' or "retarded shift' as a last step of the fingering developments and notes that its application will produce a clear articulation.

[67] Flesch, *Violin Fingering* , 96.

[68] Galamian, 32.

"Creeping" fingering as shown in example a), and should be played as illustrated in example b). While the fourth finger plays the a', the first finger contracts to f'. It then acts as a pivot for the shift of the hand and arm toward the next position. Example c) shows the use of an extension: the third finger stretches up to e'' while the first finger remains on b'. The third finger then acts as a pivot for the shift of the first finger and the hand to the second position. The same principle applies in descending fingerings as shown in examples d) and e); the former with contractions, the latter with extensions. [69]



Galamian also introduces shifting with various methods in fourths, fifths, and sixths on one string and demonstrates several fingerings (from four to eight fingerings) which enable the student to prepare for the exceptions that arise for musical or technical reasons in concert or orchestral pieces. The way of shifting here includes the traditional manner, stretching, and with 'creeping' fingering to preserve the hand shape or make an economical motion. Thus he demonstrates that fingering solutions are not absolute, but must be determined by the desirability of the various basic considerations in each particular circumstance.

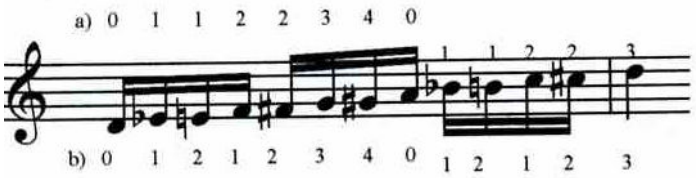
Sol Babits extensively states that all slides could be avoided by using extensions, so that "for the time in the history of music absolute clarity is possible, which is necessary for the playing of such transcendental music."[70]

[69] Galamian and Neumann, 58.

[70] Sol Babitz, *Principles of Extension in Violin Fingering* (Philadelphia 1947), 5.

d. Chromatic Scale

The chromatic fingering of Ševčík is unsatisfactory in sound because it uses too many slides with the same finger. The semitone slides, common in the nineteenth-century, obscure the clarity of the passage in a fast tempo. These could, however, be useful only for expressive purposes in a slow tempo.



a) Ševčík
b) Galamian

Galamian's chromatic fingering uses individual fingers for clarity, evenness, and articulation. In lower positions, twentieth-century fingering uses the half-shift technique: "the thumb stays in place while the finger shifts from half to second position."[71] For chromatic scales on one string, the 1-2-3 or 1-2-3-4 sequences have been currently preferred over a fingering that almost replaced the traditional 1-2, 1-2.

1-2 sequences

1-2-3 or 1-2-3-4 sequences

The sequence of fingers is arranged for logical shifting and comfortable hand shapes. The resulting lessening of tension helps secure accurate intonation and makes the passage

[71] Galamian, 33.

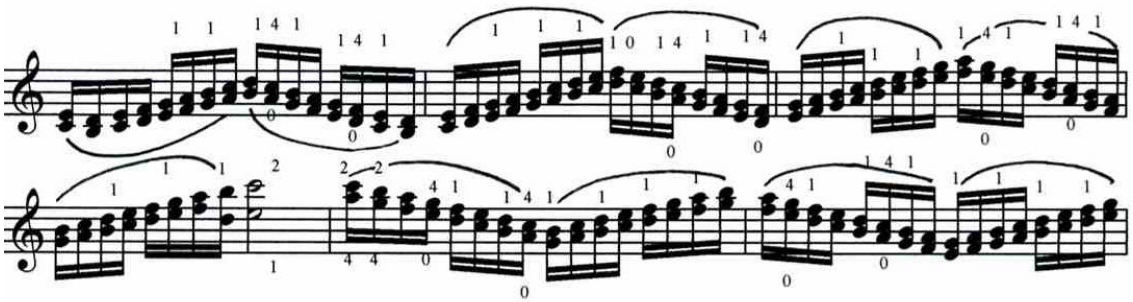
easier to play. Flesch notates both old and new fingerings. He also recommends the old fingerings since the motion they require promotes the "strengths and the agility of the individual fingers" in his *Violin Fingering*.[72]At the same time, this is an exercise that calls for the *portamento* technique. The application of fingering 1-2-3 or 1-2-3-4 can be seen in two illustrations:

Wieniawsky: *Concerto in D minor*, Op.22
First movement (measure 137-38)

Tchaikovsky: *Concerto in D major*, Op. 35
Finale (measure 295)

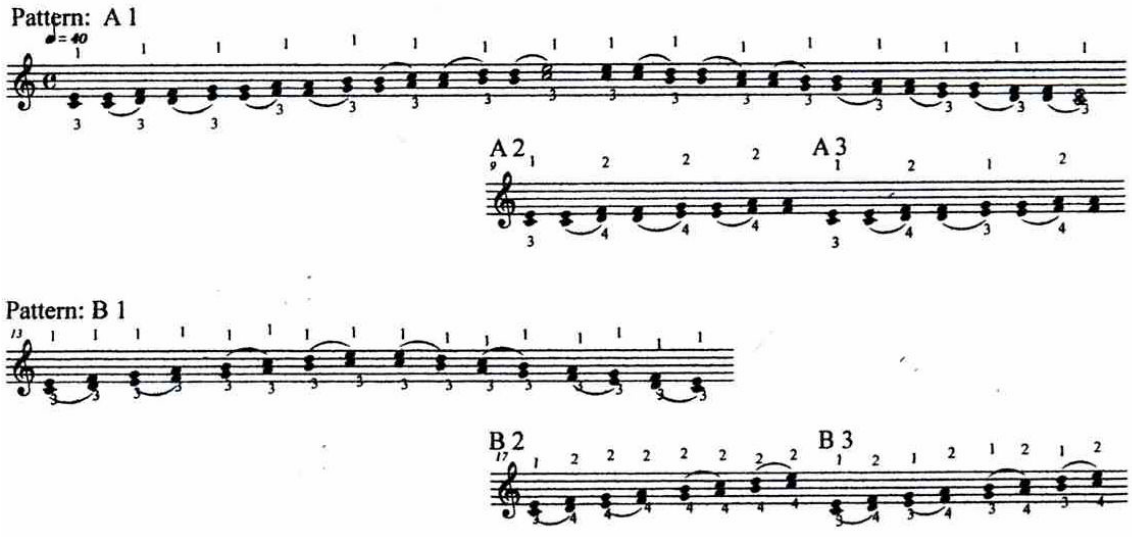
e. Double Stops

1) Thirds and Sixths



[72] Flesch, *Violin Fingering*, 60.

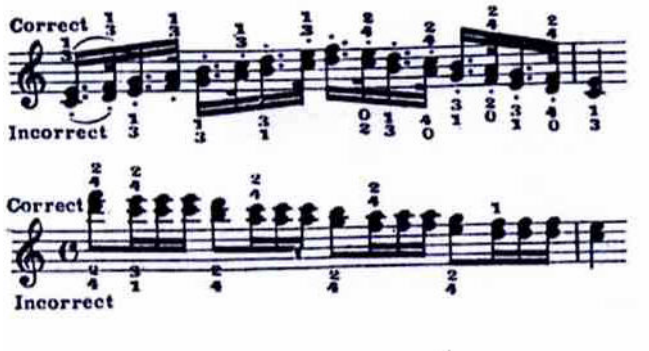
Flesch favored the above fingering because the change from the first to the third Position is so familiar, convenient and smoothly articulated by violinists. There is little choice in fingering: preserving the same fingering or alternating fingerings. Flesch generally uses an alternating fingering except in high positions. Galamian and Sassmannshaus use both types of fingerings and emphasize the relaxation of finger tension. Sassmannshaus excludes redundant parts and keeps the patterns on one pair of strings, with no string crossings during double stops practicing, which allow the student more focus on the left technique.[73]



Flesch explains that most rational fingering should be "considering of the rhythmic nature of the tone sequence to be played," because the accents which cannot be prevented in changes of position must coincide with the strong beat of the measure.[74]

[73] Sassmannshaus.

[74] Flesch, *Violin Fingering*, 135.



Thirds and sixths contain alternation of fingering patterns from the different distance between minor and major, which gives some students much trouble. Students should pay attention to this difference and Galamian's succession of chromatic minor or major thirds can help aid them in this problem.

2) Octaves

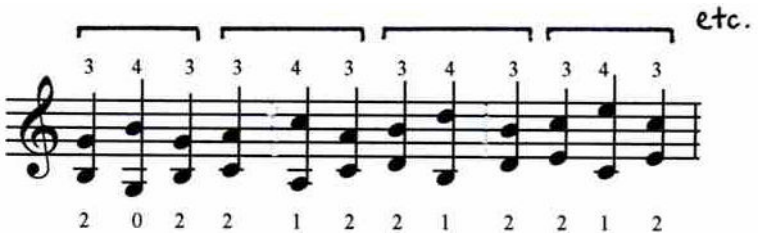
There are two types of fingerings used for the playing of octaves: One is with the uniform fingering of either 4-1or 3-1 or 4-2. The other choice is to play the octaves alternating the fingerings of 3-1 and 4-2.

Ševčík only uses 4-1 fingering for octaves which has been regarded one that maintains the hand's basic frame. Intonation could be endangered by the loss of hand shape in the nineteenth century. In the twentieth century, the fingering 3-1 for octaves in the high positions has become more generally accepted. From about the seventh Position upward, the first and fourth fingers become increasingly less suitable for octave playing due to the reduced distance between the first and fourth finger that does not give enough space for the middle fingers. It helps to accomplish the correction of inaccurate pitch much easier with the broad tip of the third finger than with the narrow one of the fourth. An additional advantage of the 3-1 fingering is that "it prepares the player for fingered

octaves."[75] Flesch suggested 3-1 fingerings for the high positions and Galamian and Sassmannshaus add 3-1 and 4-2 fingerings respectively. Although the 4-2 fingering has a very uncomfortable posture, it is very useful for preparing fingered octaves. The professor Oscar Lotti notes that "Alternating fingers is not very comfortable to squeeze fingers between each other but, it has advantage for clarity and for sustaining both tones simultaneously, thereby permitting a better legato and phrasing."[76] Ševčík did not include fingered octaves in his book.

3) Tenths

According to whether the tenth is a major or minor interval, the movements of the two fingers are different. Most students feel difficulties in learning the distance of each half- or whole-tone progression. A sixth preceding a tenth should be played by the two middle fingers whenever possible in order to prepare for the subsequent stretch and to make it easier to facilitate.



The greater reach and flexibility of a backward shift as compared with a forward shift is an advantage commonly utilized today. The stretch to the first finger is more agile than

[75] Flesch, *Violin Fingering*, 226.

[76] Oscar Lotti, "Interpretation and Left-Hand Technique for Violin and Viola", *The Strad* 89 (1978), 67.

between the other fingers. Flesch, Galamian, and Sassmannshaus agree upon the sixth as a central position. Flesch states that practicing tenths requires caution due to the excessive stretching of the fingers.

I have dealt with various types of fingerings from the nineteenth-century to the present by examining the scale books of Ševčík, Flesch, Galamian, and Sassmannshaus. They have all emphasized the clarity of sound in different ways. Baillot mentioned this about the determination of fingerings: "these methods of achieving sureness cannot be same for everyone and lack of suppleness or the smallness of the hand often militate against employing them. It is then that sureness has to be sought by exceptional, completely individual methods."[77] With these considerations, fingerings in the context of a concert piece should be worked out in accordance with the style of each composer and in preparation for the exceptions that arise for musical or technical reasons. A variety of fingerings may be practiced after learning with a definite fingering pattern. Galamian maintained that "by acquiring an independence from set patterns, violinist's whole mental approach to playing will gain in flexibility and freedom."[78]

4. Practicing Guide

Because Sevcik did not publish pedagogical literature giving students practicing guidelines, the discussion of practicing methods will focus on Flesch, Galamian and

[77] Stowell, 92.

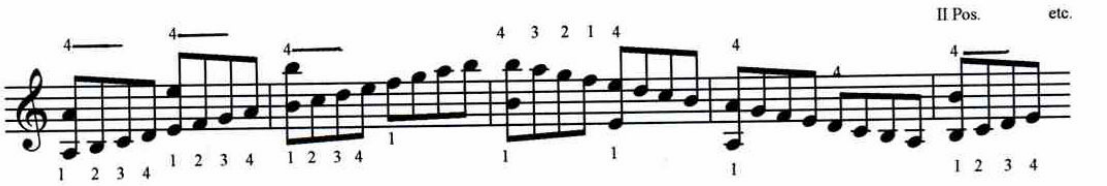
[78] Galamian, 36.

Sassmanshaus. To build pure intonation, clear articulation and agility, and good tone quality they all three suggest several practical methods.

a. Intonation

1) Scale

Ševčík notates a dash-marking for establishment of the hand frame that allows the fingers to remain in place as much as possible. For this same reason, Galamian suggests the following exercises using extensions.[79] Examp. P21



*The fourth finger is held down silently during the playing of the second and third fingers.

Galamian's scale book has one finger scale exercises, which are also recommended by Flesch in his *Art of Violin Playing* for the strengthening of a particular finger.[80]

For accurate and reliable intonation Sassmannshaus also suggests these methods:. "1) Setting metronome at 40 alternating between single pitches and rest on each click. Use each rest to anticipate the next note by singing the pitch, either in your head or aloud. 2) Progress first by removing their rests, then by playing the scale. 3) Speed up the metronome up in increments of 20 (mm=60, mm=80, etc.) until you reach the desired tempo."[81] Through this method, the violinist will acquire the feeling for correct

[79] Galamian, 21.

[80] Flesch, *Art of Violin Playing*, 134.

[81] "Intonation," *Violin Masterclass: The Sassmannshaus Tradition for Violin Playing,* 17 September 2004, <http://www.violinmasterclass.com/intonation.php> (January 20 2006).

placement and for proper stretch. Most importantly, the habit of concentrated listening brings with it the purity of intonation.

2) Double stops

Practice of double stops helps students to learn and feel the distances and relationship between two fingers which are the base for the concept of harmonic structure. For these exercises Sassmannshaus recommends practicing double stops with the 'Viotti Bowing' pattern, in which students repeat each note and shift to the next note with a slur.

By hearing each shift, students learn how to control the pressure and tension of their fingers, as well as to use accurate intonation: "This sliding also gets into hand that delicate and sympathetic feel of the double stops naturally."[82] Sassmannshaus did not invent this method. However he extensively adds to the existing double stop exercises. Galamian also gives suggestions on how to play a double stop scale with both fingers placed, but sounding only one note: first the lower throughout, then the upper. [83]

At the same time, consideration of left arm motion and right hand bow pressure is vital for good intonation. For example, in the playing of perfect fifths, Galamian suggests to watch the posture of finger, wrist, and elbow. Galamian and Sassmannshaus both emphasize the importance on the placement of the hand for fingered octave exercises. In the playing of fingered octaves, it is extremely important to stretch from the top finger

[82] Sydney Robjohns, *Violin technique; some difficulties and their solution* (London: Oxford University Press, 1950), 54.

[83] Galamian and Neumann, ii.

down.[84] The bow pressure as well as the right angle of the bow hand affects the intonation. Sassmannshaus suggests "allocating 80% of your bow pressure to the bottom string."[85] One should concentrate always on the lower note, and let it ring out strongly while the upper note sounds only lightly. The one thing that will make octave playing much easier is to concentrate almost entirely on the lower note, listening for perfect intonation.[86] Galamian also advises the violinist to listen carefully to the lower note, since the ear is naturally quicker to hear the upper one and must be trained to hear the lower. However, he warns "the extra bow pressure that will be put on the lower string can affect the pitch and would therefore require a special adjustment in the fingering." [87]Regarding artificial harmonics, Galamian suggests that the "violinist has to allot different pressure between the solidly-placed lower finger and the slightly-touching upper finger."[88] Because uneven bow pressure causes one to sound out of tune, the player has to concentrate on the bowing also. Flesch recommends "using rapid and little pressure bowing with the stick inclined." [89]

Flesch recommends, from his teaching experience, that the teacher should insist on close major and rather wide minor thirds.

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[84] "Tenths," *Violin Masterclass: The Sassmannshaus Tradition for Violin Playing,* 17 September 2004, <http://www.violinmasterclass.com/doublestops.php> (February 3 2006).

[85]"Double Stop," *Violin Masterclass: The Sassmannshaus Tradition for Violin Playing,* 17 September 2004, <http://www.violinmasterclass.com/doublestops.php> (February 6 2006).

[86] Sydney Robjohns, Violin Technique, 57.

[87] Galamian, 28.

[88] Ibid., 30.

[89] Flesch, *Art of Violin Playing*, 48.

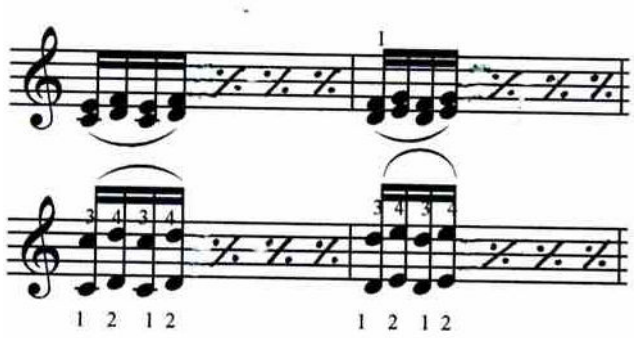
b. Articulation and Agility

On the "Execution of the Studies" in *Scale System*, Flesch notes: "The exercise may be played either slowly or rapidly for equally serviceable for intonation and facility.[90] After becoming secure with the intonation, violinists start practicing with a focus on finger agility. In execution, the practicing causes complicated technical problems to arise. When Professor Robert Gerle emphasized the importance of scale exercises, he also mentioned about the other affecting elements in scale practicing:

> "Regular scale practice is important and valuable studies for strengthening and giving flexibility to the fingers. Occasionally, fast scale practice is important to learn the sequence, order and succession of the combined finger motions, shifts, string crossings and bow changes."[91]

Flesch classifies these various problems into several categories and then recommends that students solve these problems step-by-step. He adapted this manner of thirds and fingered octaves and divided them into four kinds of movements: "falling, stretching, the change of position, and change of string."[92]

First step-for falling and stretching:

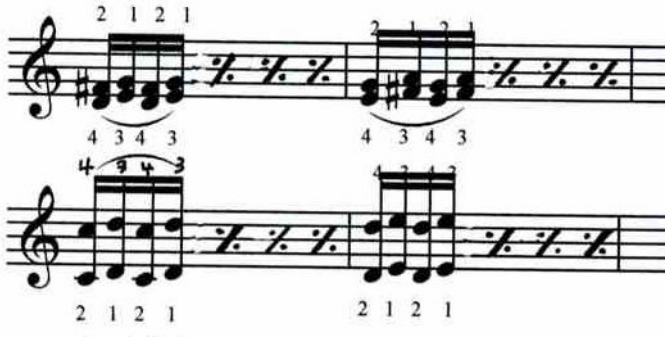


[90] Flesch, *Scale System*, 1.

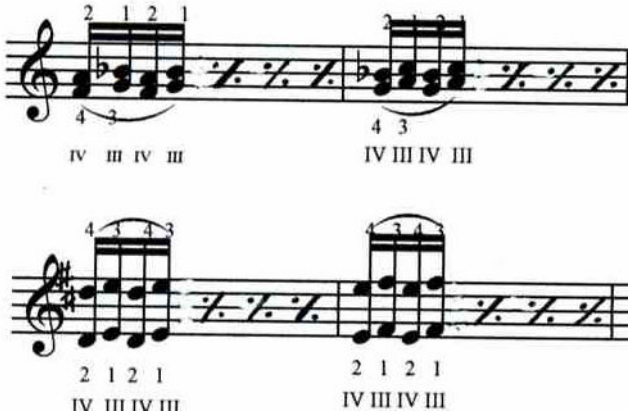
[91] Robert Gerle, The Art of Practising the Violin (London: Stainer & Bell Ltd, 1983),55.

[92] Flesch, *Art of Violin Playing*, 43.

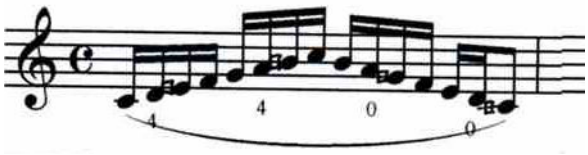
Second step-for change of Position:



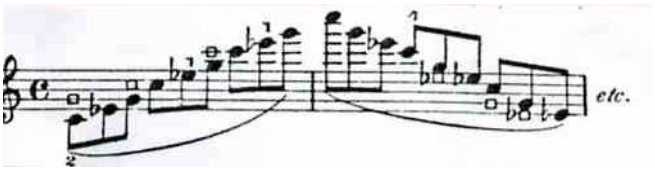
Third step- for Change of String:



Among them, he especially relies on the importance of the change of position and the change of the string. This condition is the same for the scale and arpeggios exercises and he suggests the following exercise for the smooth change of strings.[93]

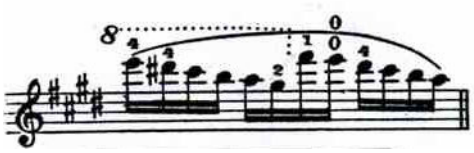


[93] Flesch, Art of Violin Playing, 40.



* the square notes are "taken in advance," without being sounded.

Flesch recommends that one should "put down the finger which is to carry out the change of string a little too soon." [94] Flesch gives this tip for the very rapid descending scales. The violinist can use the open string between the two high notes on the E string, because it sounds like not open string but part of the octave above.[95]



In which case the open string is indicated by 

Galamian uses this scale practice with his 24-note form of 1, 2, 3, 4, 6, 8, 12, and 24 notes per bow. With the incorporation of various rhythms, bowings, and placement of accents, he emphasizes rhythmic evenness, finger agility, and unanimity of both hands as well as intonation. This method can be applied to all double stops and chords exercises. However, he insists that legato playing must be used that allows control of the inaudible shift and string crossing. He also suggests playing with a physical anticipation of any chords that lie ahead. This is his special method which illustrates his preference for "control of mind over muscle than mere agility of fingers." [96]

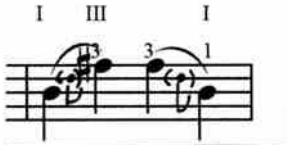
[94] Flesch, Art of Violin Playing, 25.

[95] Ibid., 41.

[96] Galamian and Neumann, ii.

Sassmannshaus uses Galamian's 24-note form, but he approachs it with a more concrete method to achieve certain goals. He presents specific tempos for practicing scales. In a 3-octave scale exercise, he recommends to "set the metronome at 52 for 2, 4, 6, 8, and 12 notes in 2 beats per bow and 16 and 24 notes in 4 beats per bow in MM= 104." [97]He also incorporates bowing exercise into the scales.

The well prepared shift leads to finger facility as well as good intonation. There are two manners of shifting: French and Russian.[98] I will not mention the Russian shift here because it is only used as an expressive tool. In scale exercises, shifts are needed for purely technical purposes that have inaudible connections between two notes. "French shifting, called the "overslide," is the style favored by French school: this is executed by releasing the pressure of the finger before leaving the preceding note and traveling on that finger to the new pitch."[99] It is useful for the clean articulation of the new note.



In performing this shift, Sassmannshaus recommends concentrating on finger pressure through the procedures of lift, move, and drop motions. Galamian gives more attention to the thumb position. Flesch also emphasizes the importance of shifting

[97] "Scale and Arpeggios," *Violin Masterclass: The Sassmanshaus Tradition for Violin Playing,* 17 September 2004, <http://www.violinmasterclass.com/scales.php> (February 6 2006).

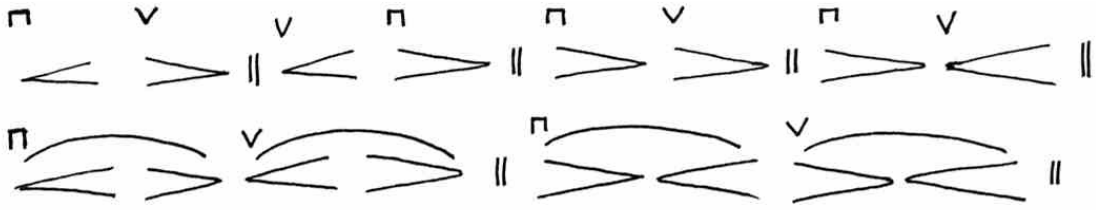
[98] Lajos Garam, *The Influence of the Spatial-Temporal Structure of Movement on Intonation during Changes of Position in Violin Playing* (Helsinki: Sibelius-Akatemia, 1990), 66.

[99]Galamian, 27.

exercises and suggests that "sustaining of the old finger for a somewhat longer period of time helps to the change of position in practicing.[100]

c. Tone production

Tone production is related to the bow exercises in regards to bow contact point, speed, pressure, even division, and straight bow.[101] However, it is too difficult to think apart from the scale exercise. Tonal quality can be achieved by methods from other studies. For example, scale exercises at various tempos also possess bow division and bow speed problems. Flesch, Galamian, and Sassmannshaus recommend that students practice very slowly at first and continue in this manner until all intonation and technical problems are resolved. Then students can start to speed up gradually until they reach the desired tempo. Throughout the practice period, one should focus on the maintenance of tone quality that is acceptable for performing in public. Galamian and Flesch also provide explanations about practicing the "*son file*, namely, the long sustained tone."[102] For sustaining a long tone or musical phrase without interruption, they adapted this practice into their scale exercises. The following examples allow for bow control and tone production.



[100] Flesch, *Art of Violin Playing*, 41.

[101] Galamian, 55.

[102] Ibid.,103.

It serves for bow control and tone production. Flesch also gives example for tone studies.[103]

IV. CONCLUSION

The preceding chapters have dealt with comparisons of the different methods in terms of contents, organizing, fingerings and shifting, and practical guides focusing on scale books by Ševčík, Flesch, Galamian, and Sassmannshaus. This document presents the ways in which the above instructors have influenced and modified the demand for twentieth-century techniques and how they have approached the fundamental problems of technique.

Scale books have been developed and established mainly by Ševčík, Flesch, and Galamian. Sassmannshaus' book, when published, can contribute the element of easy accessibility to students for further development of these important techniques. Style and fashions have evolved and changed, but the core of thought is the same. They have all provided recognized methods of attacking technical problems in an ordered progression. Recently, scale books tend to be reference books that offer practical solutions as well as fundamental principles.

There are differences in terms of fingering, shifting, scale range and organization; however, each scale book gives a good solution to thinking logically about technical problems. This document presents how Ševčík, Flesch, Galamian, and Sassmannshaus

[103] Flesch, *Art of Violin Playing*, 113.

addressed the demand for twentieth-century techniques and how they approached the fundamental technical problems. Studies of "how to practice" provided through their scale books lead violinists to possess the basic technical tools. The foundation of scale books and the accumulation of information provide guidelines, from a pedagogical perspective, that enable violinists to acquire not only the basic technical tools, but also the ability to move to the next step of musical interpretation. A course of study, utilizing all of the established scale methods, will simplify technical problems and help violinists advance to the next step of interpretation.

"Whoever has the patience to spend several months practicing Ševčík's studies will find the result worthwhile in technical aspect."[104] Even though violinists know the merits of his system for specialized training for techniques, the excessive practice required by Ševčík's tedious studies could cause students to not practice his methods. As an example, one bowing exercise consists of 726 different bowings, not including the additional variants in place of bowing such as the upper or lower half, or at the frog, middle or tip. Ideally, a different exercise should be focused upon every day in order to include variety in the practice regimen. Additionally, Ševčík's presentation of fingering and organization is old fashioned. Galamian has taken great pains to utilize elements of recent techniques and ideas such as bowing and rhythmic patterns; however, I have found through my teaching experience and by talking with colleagues that few students actually utilize his methods in their practice. Flesch and Sassmannshaus's compact and accessible approaches can elicit effective results within a restricted practicing time. However, for the tedious passages in the pieces, students need various systematic approaches which are

[104] Walter Kolneder, *The Amadeus Book of the Violin*, translated and edited by Reinhard G. Pauly (Portland, Or.: Amadeus Press, 1972), 461.

suggested in the Ševčík and Galamian books. By applying these methods, students can gain confidence in difficult passages of repertoire. The adoption of the Ševčík and Galamian systems can be recommended for the young student who has ample practice time and exhibits perseverance, but these methods must be properly tailored to each individual student. Due to the significant differences in difficulty of the above methods, care must be taken to prescribe the appropriate methods for each student; for example Ševčík's method should be assigned to a beginning student needing to establish basic techniques, while Galamian should be reserved for advanced students requiring expanded techniques. Most violinists practice daily scale exercises with only diatonic scales and find it easy to ignore the other technical formulas. For this reason, Flesch's book is more accessible for advanced students to review complete exercises.

There are many advantages in Sassmannshaus's book in terms of regulated fingering patterns, organization of the book, and practical guides. If one notes the publishing dates of each book, it is clear that the most recent book provides the most current methods that correct many of the weaknesses of the earlier methods. His website allows students to learn both technical concepts and methods easily in accordance with the book. Students can confirm their own way of practicing through screen demonstrations, which help them to accurately comprehend techniques and focus on the economical use of time and the manner of playing. To further the idea of practice as a condition of learning, the students are also trained in how to develop these techniques. A significant contribution to the establishment of technology into the groundwork of violin education has been made by Kurt Sassmannshaus. However, recent twentieth-century techniques such as double stop fourths, fifths and sevenths, whole-tone scales, double

harmonics and modern shifting techniques such as extensions should be studied from Galamian's book as they are not covered by Sasshannshaus.

The understanding gained through identification and comparison of fingerings will permit the formulation of a principle by which each violinist may individually approach their own rational fingering solutions. Galamian's variety of fingerings can be considered for their artistic and technical merits after studying the fundamental fingerings of Flesh and Sassmannshaus. The main consideration is the development of both the player's self-confidence on the concert stage and his own individual physical characteristics.[105] The decision as to how and when to address matters such as fingering, bowing, and practical methods, however, will have to be based on considered judgments of the student's personality.[106]

The scale books of Ševčík, Flesch, Galamian, and Sassmannshaus all teach a certain method of approaching the goal of acquiring basic exercises in the study of violin technique. Ševčík started reconstructing the whole approach to the technique of violin studies. Influenced by Ševčík's logical approach, Flesch organized complete scale exercises in a compact form for advanced students. Galamian then expanded the available study material focusing on coordination of left and right hand by introducing bowing styles and rhythms and covering unusual techniques of twentieth-century music for advanced students. Sassmannshaus covers basic techniques at all levels and considers their practical uses. He also uses a comprehensive website that demonstrates his innovative teaching methods.

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[105] Kolneder. 478.

[106] Galamian, 106.

When a violinist can cope with the basic elements such as scales, arpeggios, and double stops successfully, he/she can tackle any given repertoire for successful performance. To establish this, violinists should include scale exercises in daily practice not only because these will serve to better technique, but they will also help the violinist(s) to find the right balance of every element in each work. As Galamian states: "The building of violin technique is no longer a matter of guesswork. It is now an EXACT SCIENCE."[107]

[107] Galamian, 141.

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