An Examination of Left-Hand Technique for Violinists with a Small Left Hand, and a Practical Guide for Developing Techniques

by

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ABSTRACT

In this paper I present approaches to left-hand technique, perspectives and solutions for violinists with a small left hand, and provide effective practice methodologies to implement solutions. It is intended to help violinists evaluate and understand finger mechanisms. One of my main goals was to survey treaties on this subject, and fill in gaps in their approaches. The paper consists of three chapters. The first chapter provides an overview of treatises by selected notable violin pedagogues regarding left-hand posture and finger function. I also explore new perspectives by current pedagogues who expand upon earlier treatises. The second chapter provides an analytical perspective on the fundamentals of violin playing. I examine the functions of the left-hand skeletal and muscular structure, and explore methods for managing tension and relaxation. The third chapter presents a series of exercises to improve finger independence and compatibility. Each exercise is accompanied with corresponding videos that demonstrate and explain the details of execution, and incorporate these techniques into selected etudes and standard repertoire.

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CHAPTER 1

Introduction: Perspectives on Left-hand Structure and Finger Function from the Late-19th Century to Present Day

The posture of the left hand and finger placement in violin playing has been popular subjects of ongoing research and refinement among violin educators since the 17th century. They directly impact a player's ability to execute complex passages, control intonation, and achieve resonance and musical expression. Moreover, each violinist encounters unique challenges due to their individual anatomical differences such as arm and finger length, finger thickness, and palm width. This diversity calls for personalized strategies, ensuring that each violinist can discover their optimal hand position. Their findings and treatises, which have been widely used and trained violinists all over the world, have contributed greatly to the ongoing research of today's violin educators.

In the first chapter, I will provide descriptions accompanied by video demonstrations that reflecting the insights of renowned violin educators from the late 19th century to contemporary times including Leopold Auer, Carl Flesch, Demetrius Constantine Dounis, Ivan Galamian and Simon Fischer. Their approach to violin techniques is not only elaborated in detail but also begins with the fundamentals of violin playing. Furthermore, they have developed unique technical systems that address the varying degrees of the techniques, ensuring that violinists experience a smooth process of technical advancement. Ultimately, this method equips students to master challenging techniques, and the fruits of this educational approach have produced numerous

outstanding violinists! The descriptions accompanying videos aim to provide on each violin instructor's treatises and explore the essential elements of left-hand posture, finger placement, and finger pressure in violin playing. As I examined the teachings of past and present masters, I was surprised to discover that the insights offered by these violinists may not universally address the challenges faced by all players. There appears to be a conflict of compatibility between the unique shapes of certain players' hands and the pedagogical theories proposed by their instructors, as some hand shapes resist specific movements prescribed by these theories. Using my own hand shape as a reference, I will illustrate both the advantages and considerations in executing these approaches.

Leopold Auer (1845–1930)

Hungarian violinist Leopold Auer was a towering figure in violin pedagogy, a prominent symbol of the Russian violin school. He established himself not only as a distinguished performer but also as an exemplary teacher whose insights profoundly shaped the art of violin playing. With roots tracing back to famous instructors like Jakob Dont and Joseph Joachim, Auer's influence extended far beyond his own performances. His pedagogical prowess cultivated the talents of prodigious students, including Mischa Elman, Jascha Heifetz, and Nathan Milstein. In his work "*Violin Playing as I Teach It*," Auer elaborately compiled a comprehensive collection of insights and methodologies that reflect the essence of violin techniques cultivated over a lifetime of dedication. This

collection, rich with nearly every important foundation of violin technique, served as a guiding light for subsequent generations of violinists.

In exploring the context of left-hand posture and finger placement prior to the 19th century, Auer observes the absence of strict guidelines dictating fundamental aspects of violin technique. Instead, the approach was flexible, customized to suit the unique needs of each individual player. It was the teacher's responsibility to evaluate the student's hand size and finger length, and craft a suitable method to properly utilize their hand.

Holding the violin:

Auer regards holding the violin as particularly important. He emphasizes that: "the eyes may be fixed on the head of the instrument, and the left arm should be thrust forward under the back of the violin, so that the fingers will fall perpendicularly on the strings, the fingertips striking them with decided firmness."[1] He pointed out two crucial aspects to avoid from the outset:

> Avoid resting the violin on the shoulder, shoving the shoulder underneath the violin, and placing a cushion beneath the back of the instrument, to lend a more secure support to the chin grip, should also be avoided, since it not only spoils the violinist's pose in general, but also it will make player lose at least a third of the whole body of tone. As for the chinrest, it should be adapted to the individual neck, so that the player is able to hold the instrument easily and without strain. Lastly, the left arm should incline slightly to the left and always try to raise the violin as high as possible, to secure for your hand freedom of movement from one position to another.[2]

Left hand finger placement and pressure:

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[1] Leopold, Auer. *Violin Playing as I Teach it*. (New York: Frederick A. Stokes Company, 1921), 32.

[2] Ibid., 32-33.

> The thumb should not extend beyond the fingerboard of the instrument, this prevents the player from using the G-string, try to hold the thumb thrust forward more in the direction of the second and third fingers, so that hand will have liberty of action by increasing its stretching powers. To test thumb placement, put second finger on note F, on the D string, in the first position, thumb should in the self-same line.[3]

Auer's perspective on left hand finger pressure stands in opposition to "finger relaxation." It matters not if a violinist possesses large hands, normal hands, or small hands; it is the intentional application of pressure that enhances tonal richness and resonance. He advocated：…*the pressure of the finger must conform in exact measure to their physical strength.* The more one tries to diminish the body of tone, in a *piano* and *pianissimo*, for instance, the more one should increase the finger pressure…"[4]

In his treatise, Auer insists on the use of strong left hand and finger pressure to achieve a superior tone quality on the violin. He argues that applying less pressure will result in a harsh, shrill sound. For a more in-depth explanation of Auer's theory on finger pressure, a demonstration video link is attached below:

https://youtu.be/UDfNAdVhMFI?si=3KaL_MbpDEBTJXO6

The examination results are based on my experiences， while strictly complying with this master's treatises； However, there remains flexibility for violinists with different bodily structures than mine which may experience varying outcomes.

[3] Ibid., 34-35.

[4] Ibid., 90-91

Advantages:

1. Without a cushion placed on the back of the violin, the instrument will vibrate more and produce a richer resonance. This resonation directly conveys to the player's body.
2. Given my ordinary arm length, I find my left arm tilting slightly to the left more comfortable than angling toward the right side before reaching up to fourth position, it helps me to relax my deltoid muscle.
3. Raise the violin high, facilitating a smooth shift from the low to higher position.
4. Thumb in the same line with the second finger, conveying greater strength to the fourth finger.
5. The greater finger pressure exerted on the fingerboard causes the strings to vibrate more intensely; because it cuts the string deeper, thus when the bow hair crosses the string, it produces a firm and clean sound.

Consideration:

1. If violinists choose not to use a cushion in the back of the violin, it becomes essential to select chinrests that fit the length of their neck and adjust to an appropriate height for the jaw.
2. An optimal finger pressure should meet one’s physical strength. While hard finger pressure brings firm sounds, excessive finger pressure will stimulate the nervous system at the fingertips, causing pain and also diminishing the dexterity of the fingers.

Carl Flesch (1873-1944)

Known as one of the influential violin performers and pedagogues of the 19th century, Hungarian violinist Carl Flesch contributed two collections "*The Art of Violin Playing,* Books 1-2," and "*basic studies for violin.*" Both of these books stand on top of treatises on violin education, not only for his detailed explanation of the violin techniques but also for his scale system. His pupils include Ivry Gitlis**,** Ida Haendel and Henryk Szeryng, all of whom achieved considerable fame as both performers and pedagogues.

Holding the violin：

Like many great instructors from the old violin schools, Carl Flesch advises against placing a cushion on the back of the violin, as it diminishes the connection of the body to the instrument and results in reduced vibration. However, Flesch suggests that violinists with longer necks may benefit from a small cushion for support. Without this cushion, violinists tend to draw up their shoulders, leading to tension in the left arm and adversely affecting their technique: "Long - necked players, therefore, must resign themselves to using the cushion as a necessary evil with which they cannot dispense."[5] Flesch elaborates on the position of the violin:

[5] Carl, Flesch. *The Art of Violin Playing.* translated by Frederick Herman Martens. (New York: C. Fischer, Incorporated, 1924), 15.

> As regards the position of the violin, it is placed on the collar - bone, held by the left lower jaw and is only supported by the left hand which, above all, must retain the greatest possible freedom in change of position.[6]

For holding the instrument with the left hand, he states that “The Positions of the Arm, Fingers and Thumb are closely interconnected and interdependent. One cannot be changed without the others participating in the change. The thumb is neither completely bent nor entirely stretched but slightly bent. This may be defined as a "natural" position in the best sense of the word.”[7]

There are two distinct approaches to mastering the left-hand posture that emerges from this concept. 1. “The left arm slowly draws near the violin neck, which thrusts itself between index finger and thumb. The index finger touches the right side of the violin neck at the lower end of its third joint, so that it still may move freely in the carpal joint. The fingers are laid upon the A-string, and the position which the thumb now assumes, its slight curvature, its relation to the other fingers, the point at which it touches the neck.”[8] 2.“The thumb carries the neck, the latter rests upon it, but the index finger does not rest against the neck, the arm is turned inward still more, the fingers are compelled to drop squarely upon the strings.”[9]

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[6] Ibid., 15.

[7] Ibid., 17.

[8] Ibid., 17.

[9] Ibid., 17.

Left-hand finger placement and pressure:

In addition to the two left-hand postures indicated above, Carl Flesch has also outlined the corresponding finger placements and movements, detailing how each finger should articulate with the strings, emphasizing the need for a relaxed yet purposeful approach:

> Finger has falling movement, side movement, thumb provides a light and uncramped, support of the neck by the thumb on one side and the third joint of the index finger on the other; supplies a counter-pressure for the pressure of the four other fingers; and acts as an intermediary in the transfer from the middle position to lower position, and upper position. The player who has a long fourth finger will have to curve it when placing it on the string; while a finger that is too short must be stretched, exaggerated curving will waste strength, the danger of slipping is far greater, and the fingernails touch the strings, which makes the tone more acute. The exaggerated flat application of the fingers, I am quite as opposed to it, because of the contact with the little fat cushions of the lower part of the finer tip, the tone grows noticeably softer. Furthermore, the index finger should only touch violin neck sideways, not with the inner surface of the third finger joint, since this, consequently, would entail an inward turn of the lower arm, making the arm position still more strained than it already is owing to the shape peculiar to the violin.[10]

Regarding finger pressure, Flesch highlighted that each finger must fall upon the string with an effortless elasticity driven by its own innate motive force; an exaggerated raising or flinging of the fingers will waste of strength, making noises, as well as destroy the purity of the sound; and excessive pressure from the fingers can be harmful, as it runs the risk of overly irritating the nerves at the point of pressure.

This demonstration video will adhere to the principles outlined in Carl Flesch's treatises. Viewers will gain a clear perspective on what Flesch advises to avoid, along

[10] Ibid., 18.

with a comprehensive understanding of finger movement mechanics and essential techniques to enhance left-hand abilities.

https://youtu.be/1iq7SflMcDc?si=kAp-lK0Wy5-ZG68K

Advantages:

1. Violinists with a long neck place a cushion at the back of their instruments and will experience enhanced support and a greater sense of security in the connection between player and violin, allowing the left shoulder to relax and diminish tension while holding the instrument.
2. Resting the violin upon the collarbone will feel its stability between chin and shoulder. Adjust the violin's position by utilizing the upper part of the torso.
3. The first left-hand posture, with the third joint of the index finger touching the right side of the violin neck, can be advantageous for a fast passage, as all the knuckles of the fingers are elevated, facilitating swift finger movements.
4. With a thumb lightly supporting the violin neck, shifting is easy.
5. Fingers falling with an elastic motion upon the strings, offers a sudden burst and a swift release effect, this motion cultivates the finger's capacity for independence and relaxation

Consideration:

1. If violinists choose to use a cushion on the back of the violin, it is essential that the cushion’s height and size are appropriately matched to the collarbone, ensuring that it

is secure and comfortable upon the collarbone.

2. Violinists resting the violin on the collarbone should avoid excessively pulling the violin towards to the neck, particularly when shifting to higher positions.
3. Flesch offered no specifics regarding the optimal angle for a slightly bent thumb. I experienced varying tension when the thumb was bent inward versus when it was turned outward.
4. To achieve an elastic motion of the finger, it is essential to cultivate an inner strength within it, such as a sudden fall and release in the movement of the finger.

Demetrius Constantine Dounis (1886-1954)

D. C. Dounis, a pioneering Greek violinist, violist, and mandolin player, distinguished himself not only through his virtuosity but also by earning his medical degree at a young age. This accomplishment profoundly influenced his approach to music education, where he employed a unique methodology that differed from traditional pedagogical approaches. Drawing upon his medical training, Dounis's approaches echoed a physician diagnosing a patient. He carefully analyzed the challenges faced by his students, emphasizing the identification of root causes. This diagnostic approach not only enabled effective problem-solving but also cultivated a deeper understanding of the complex relationship between technique, memory, and emotion in musical performance. His significant publications are "*The Dounis Violin Player's Daily Dozen, Op.20*,"

"*Preparatory Studies in Octaves and Tenths, Op. 22,*" and "*Fundamental Technical Studies for the Young Violinist, Op. 23,*" were designed to address techniques through mental practices, ultimately progressing to enhance the physical control for playing the violin with ease. Additionally, he guided countless professional violists in refining their technique and addressing various challenges. Many of his pupils, inspired by his passion and expertise, became concertmasters and soloists in symphony orchestras.

Holding the violin:

Dounis firmly believed that the violin should become an extension of the body, Therefore, he took a stand against the use of shoulder rest, or "pad." He encouraged his students to cultivate a connection with their instrument. Valborg Leland, author of "*The Dounis Principles of Violin Playing*" outlined Dounis's beliefs regarding the proper hold of the violin:

> The violin must have free leverage to either side. With a pad there is a tendency to hold the violin in one "set" place. The pad tends to dampen the tone. There should not be anything between you and the violin. The violin must be a part of you. The arm is given a better chance for a natural position. The chin should rest lightly on the chin rest, with excessive pressure resulting in tension in the neck. The left shoulder should be lifted slightly. This way, the shoulder supports the weight of the arm.[11]

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[11] Valborg Leland, *The Dounis Principles of Violin Playing: Their Meaning and Practical Application* (London, The Strad, 1949), 39.

Chris A. Constantakos author of "*Demetrios Constantine Dounis: His Method in Teaching the Violin*" states: "The left arm should be positioned at a 45° angle to the body, with the elbow bent and the hand at the level of the shoulder. The forearm should rotate to the left（supinate), causing the palm and fingers to turn as well."[12]

Left hand finger placement and pressure:

In contrast to the treatises of other instructors, Dounis offered only sparse guidance on finger placement and pressure in his "*The Dounis Violin Player's Daily Dozen, Op.20*," and "*Fundamental Technical Studies for the Young Violinist, Op. 23."*

"Keep the elbow well under the violin and the fingers parallel to the string. Try to forget the existence of the thumb, never press it against the neck of the violin. Do not strike the fingers upon the string with too much force, it is wasting one's physical energy. Cultivate a very sudden and elastic spring- like finger action and keep every preceding finger on the string."[13]

Dounis requires the directions for practicing to be strictly observed: "The playing finger should be placed on the string firmly, with a decided, non-quivering, independent and vigorous finger action. Keep all other non-playing fingers relaxed, the fingers preceding the playing one should touch lightly, relaxed, the string on their respective

[12] Chris A. Costantakos, *Demetrios Constantine Dounis: His Method in Teaching the Violin* (New York: Peter Lang Publishing, Inc., 1997), 35.

[13] D.C. Dounis, *The Dounis Violin Player's Daily Dozen, Op. 20.* (New York: Harms, Inc., 1925), 3.

tones. Raise the fingers in their entirety, retaining their natural curved state; the finger away from the string should have the same curved shape as when on the string."[14]

Although these instructions contain only a few phrases about finger placement and pressure, they imply an expectation for the player to be at ease, allowing their physical strength to flow naturally, without applying any unnecessary force with either the thumb or other fingers. Additionally, Leland elaborates on Dounis's approach to finger positioning:

> Place a pencil between the thumb and the first finger (the pencil should point toward your nose). Turn the hand so that the other fingers fall on the pencil in a parallel line with the first finger. Do not obtain this parallel line by merely extending (straightening) the fingers to reach the pencil. The fingers should remain in their original curved shape and the whole hand turns until the three fingers touch the pencil and are on a parallel line with the first finger.[15]

As a violin educator with a medical background, Dounis emphasized the importance of listening to the body's voice while cultivating the natural mechanics of bodily functions and finger movement. This approach allows the player to build a connection with the violin, free from injury. I will elucidate Dounis's guidance with a demonstration video.

https://youtu.be/QuJG-Ryc7og?si=KPEl5pH9sgzbC_Nw

[14] D.C. Dounis, *Fundamental Technical Studies for the Young Violinist, Op. 23*. (Philadelphia: Theodore Presser, 1935), 4.

[15] Leland, 39.

Advantages:

1. Holding the violin without a pad in the back, I sensed violin became part of my left arm, and free to adjust in any direction.
2. The left arm positioned at a 45° angle to the body facilitates ease when playing the lower strings; it also helps large shifts from lower to higher position, as the elbow already maintains an inward shape.
3. Keep fingers parallel to the string. The first three fingers should be light and organized, drawing support from the wrist. This position provides a swift and gentle vibrato, as the center and left side of the fingertips contact the fingerboard. However, violinists with small left-hand place fingers parallel to the strings, may encounter challenges in extending their fourth finger.
4. The playing finger should be placed on the string firmly, with a decided, non-quivering finger action. Indeed, because with the finger action falling to the strings, fingertip firmly touching the string that ensures clean articulation, while a quavering fingertip onto the string will affect the intonation.

Consideration:

1. There should not be anything between you and the instrument, and the violin must have free leverage to either side-this is an important principle. However, freedom does not equate to a lack of control. Players must focus on a state of controlled relaxation, rather than a complete sense of freedom.
2. Violinists lifting their shoulder to support the weight of the arm need to pay special attention that shoulder should not be over lifted, as this will alter the angle

of the violin. Such a change in angle can affect the bow stroke. Additionally, once the shoulder has been elevated, it is crucial to find a way to release that tension, allowing the shoulder to drop back into a relaxed position.

3. If violinists hold the violin with their left hand angled at a 45° angle to the body and experience tension in the back or side of the shoulder, they should consider altering their holding posture.
4. Fingers parallel to the string provide many advantages, however, for violinists with a small left-hand, reaching with the fourth finger to play in tune becomes a challenge. The finger must extend excessively to maintain a straight shape, which drains energy from the finger's motion. This is because when the fingers are positioned parallel to the string, the base knuckle of the fourth finger has greater distance from the string.

Ivan Galamian (1903-1981)

As a towering figure in the realm of music pedagogy, Ivan Galamian's influence in the 20th century remains unmatched. His profound insights into technique and musical expression inspired countless students to achieve extraordinary heights. Galamian's approach was not merely about mastering technique; at its core idea was to cultivate a deep emotional connection with the instrument. Many renowned violinists trace their lineage through him, such as Itzhak Perlman, Pinchas Zukerman, Kyung-Wha Chung,

Dorothy Delay, James Buswell, carrying forth his legacy of passion and mastery into the broader world of music. Throughout his educational journey, he edited numerous violin texts and published his own seminal works, "*Principles of Violin Playing and Teaching*" which provided foundational insights for violinists, and "*The Galamian Scale System, Volumes I-II*" a comprehensive guide that systematically delved into scale practice.

Holding the violin:

The principle of Galamian's Philosophy on body and instrument is: "The relationship of the instrument to the body, arms, and hands has to be one that will allow a comfortable and efficient execution of all playing movement."[16]

Galamian challenges other method's violin rules as he believes that there should be a more flexible approach to holding the instrument rather than strict rules for violinists, to accommodate each person's unique body structure. He clarifies that for a violinist with a long neck, using a pad or shoulder rest is the most effective solution. However, it is essential to choose an appropriate pad or shoulder rest that does not cover or touch the back of the instrument, as doing so may absorb the tone.

> The chin must never be allowed to press on the tailpiece, the best way to avoid is use of a chinrest and set to beside being more comfortable. For the height of the violin scroll when in playing position, it is better to have it higher than lower, because a high scroll throws the weight of the instrument toward the neck and shoulder, whereas, if the scroll is too low, the weight falls toward the left hand and the bow tends to slide toward the fingerboard. The left arm should be placed in such a way as to allow fingers to have the most favorable conditions to move various actions, the older schools of violin playing required every student to pull the left elbow far to the right.

[16] Ivan Galamian, *Principles of Violin Playing and Teaching*. (Englewood Cliffs, NJ: Prentice-Hall, 1962), 12.

> Player with long arms and fingers assumed an awkward curve and leaned too heavily toward the G- string side of the fingerboard and more often the nail touches the fingerboard rather than the fleshy part of the fingertip.[17]

Left hand finger placement and pressure

In Galamian's teachings, the position of the arm and wrist closely influences the nuances of finger placement: "the player with short arms and fingers will have to bring the elbow fairly far to the right, and those who with long arms and fingers will find that the elbow will remain somewhat more to the left, and it does not matter what type of placement violinist uses, the elbow should change its position beneath the instrument as the finger moves across the strings. When the fingers approach the G string, the elbow moves more to the right, for the E string, more to the left, when shifts to a high position all players should pull to the right. Wrist, too, it should not allow any sideway curve in the hand, either to left or right, except playing chords and in the higher position, the wrist required to bend inward or curve outward, otherwise it should be held in such a way that there is approximately a straight alignment to the hand."[18]

He mentioned that: "there is a school of thought that advocates the base knuckles of the left hand should be parallel to the strings, such a position is not natural and creates tension by turning of the hand and forearm. The hand should not remain distant from the neck of the instrument but should slightly touch both sides of the violin neck, additionally, the hand should not clutch the instrument, because it restricts the freedom of action of the

[17] Ibid., 13.

[18] Ibid., 14.

finger, hand and arm. The contact on the side of the index finger should be maintained up to the third position, then when position upward, the index finger begins apart from the neck of the instrument."[19]

Regarding the finger position:

> All fingers fall perpendicularly on the tips either in the "square" position or in an elongated position, depending upon the note being played. All fingers assume the elongated shape when they reach up a half step or more from their basic placement. The tips of the fingers slant slightly towards the bridge and contact the strings a little to the left of the center of the fingertip, the slant of the fingers should be neither too steep nor too flat, if violinist with short finger, then the neck of the instrument is set somewhat closer to the base knuckle, and the elbow is placed more to the right. If the fingers are long, the neck is closer to the middle joint and the elbow is held more to the left. The thumb needs very special attention, the most common fault is thumb clutching the neck of the instrument, the thumb has the function of exerting a counter-pressure against the playing fingers, and it can take care of this task most efficiently if the pressure acts from below in a direction opposed to the pressing finger. The thumb should not stick upwards too much above the fingerboard because this position can promote the sideway pressure. As always, there are exceptions, considerably a long thumb rise above the level of the fingerboard, since the fingers would not otherwise be able to reach their proper places on the strings. A short thumb will have to be placed more under the neck of the instrument. In general, the thumb should be neither completely stretched nor too bent, it should approximate the curvature of the neck of the instrument.[20]

Galamian's concept of finger pressure aligns closely with Dounis's approach:

> Most players use too much force in all left-hand action, they bang their fingers too hard, lift them too high, and press them too solidly after contacting the strings. To play in this manner all the time is not only unnecessary, but also very harmful. Lifting too high slows down the action by adding to the distance that has to be covered, and banging the pressing is

[19] Ibid., 15.

[20] Ibid., 17-18.

> apt to build tensions that are dangerous. An easy pressure, sufficient to hold down the strings, is all that is normally necessary.[21]

Galamian's treatise offers a comprehensive insight into the nuances of body posture when holding the violin, providing detailed explanations of how the arm, hand, and finger functions relate to the instrument. His teaching clearly addresses the varying sizes of hands, arms, and fingers, guiding violinists on what to avoid and what to focus on. The accompanying demonstration video will encompass his perspectives on everything from holding the violin to finger placement.

https://youtu.be/_Y_mmw_EWZU?si=tloUX5_GGO2Y-MbL

Advantage:

1. Long neck violinists should use pad or shoulder rest, for an appropriate shoulder rest effectively bridges the distance between the shoulder, the violin, and the chin.
2. The left arm should be placed in a way that allows fingers to perform various actions. Galamian emphasized that the left arm should remain flexible, providing crucial support to the techniques performed by the fingers, ensuring it harmonizes rather than conflicts with their movements.
3. Violinists with short fingers have to bring the left elbow to the right. To help the fourth finger to reach the G string easily; long-fingered violinists should shift their elbow to the left, as failing to do so may cause their fingers to touch the edge of

[21] Ibid., 19.

the fingerboard on the left side.

4. Regarding the wrist action, most of the time, the wrist should align with the hand, providing support to both the hand and fingers. Some left-hand techniques may require the wrist to bend slightly to the left or right, or to stretch outward or upward.
5. The slant of the fingers should be neither too steep nor too flat. To elaborate on Galamian's insight, too steep a finger posture on the string causes tension in the fingertip, and too flat finger touch string causes tension in the third joint of the finger. It is essential for all fingers to keep a natural curved shape.
6. The thumb has the function of exerting a counter-pressure against the playing fingers, I found that positioning the thumb at an angle between seven to nine o'clock direction creates a balanced counter-pressure, allowing the other fingers to remain relaxed.

Consideration:

1. With numerous types of shoulder rest available today, selecting the proper one for a player's body is crucial. Equally important is the need to test a shoulder rest so that it NOT absorbs the vibrations of the violin.
2. The hand slightly touches both sides of the violin neck: it is crucial to keep reminding yourself not to squeeze, particularly with the index finger and thumb. Too often, I observe players beginning to grip tightly after four or five minutes of playing.
3. Regarding the fingertip contact, violinists who contact the string with the left side of the fingertip should be mindful not to apply excessive pressure; otherwise, causing

the tip of the fourth finger to lose precision in its aim down to the string. Moreover, when executing a double stop that includes an open string, this excessive pulling leads to the placing fingers brushing the open strings, resulting in a massive noise.

4. An easy pressure, sufficient to hold down the strings, is all that is normally necessary. Given that not every violinist possesses the same physical strength, discovering the right amount of finger pressure becomes essential. Additionally, in fast passages, violinists must raise their fingers to a certain height to achieve a clear articulation; fingers positioned too close to the strings result in a blurred sound.

Simon Fischer (1956-)

Australian violinist Simon Fischer is regarded as one of the most prominent violin pedagogues of the 21st century. He studied in New York City under Dorothy Delay and currently holds the position of violin professor at the Guildhall School of Music, in addition to other music institutions. Fischer's treatises synthesize the traditional rules of the Russian, French, and American violin schools, offering a distinctive perspective on left-hand technique and exercises. His publication, "*The Basics Series*" encompasses nearly every aspect of violin technique, with the core intention of providing tailored adjustments to body posture, hand, finger, and bow exercises that meet the demand to a violinist's individual level. This ensures that both students and professional violinists can find guidance suited to their specific needs.

Holding the violin:

Simon Fischer's perspective on the complex art of holding the violin divides musicians into two distinct categories along with four critical elements that demand consideration. The first group comprises violinists with shorter arms, while the second includes those with longer arms. Each group is advised to adopt a suitable approach to holding their instrument. The four essential elements that relate to the violin's positioning are the angle to the body, chin rest left or right, the height of the scroll and tilt. Fischer describes:

> In general, the violin needs to be angled so that at the point, with the bow parallel to the bridge, the right arm is neither entirely straight at the elbow not too bent. In finding the best position there are two main factors to consider: the angle to the body, and how high the instrument is placed on the shoulder.[22]

Violinist with short arms:

> Holding the instrument more in front, if the violin too far to the left, the bow arm is too straight at the point and the bow is not parallel with the bridge, and in the lower half the upper arm must reach too far forward.[23]

Violinists with long arms:

> Should hold the instrument more to the left, if violin too far to the right, the forearm is only just past the 'square' position even though playing at the point, and in the lower half the upper arm must move too far back.[24]

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[22] Simon Fischer, "Basics," *The Strad*, June 1994,1-2, https://www.simonfischeronline.com/uploads/5/7/7/9/57796211/036hold_.pdf

[23] Ibid.

[24] Ibid.

How high should the instrument rest upon the shoulder: in addressing this, we must first consider the positioning of the chin. Fischer advocates, "short armed violinist often feels more comfortable with a chinrest that places the chin is nearer to, or directly above, the tail piece and hold instrument higher on the shoulder. This shortens the distance the bow arm has to move and helps avoid ending up with an entirely straight arm at the point; longer arm violinist, need a chinrest that naturally positions the chin a little more to the left of center, away from the tail piece and the violin lower on shoulder. This lengthens the distance the bow arm has to move and helps avoid ending up with nearly a right angle at the elbow when playing at the point."[25]

The height of the scroll, referred to as the violin level, plays a crucial role in influencing the bow arm and the direction of the bow when the violin is held at varying heights. Fischer clarifies that: "The higher the scroll is angled up, the further you have to reach forward with the arm to play to the point with a straight bow. With a low scroll, even the shortest arms can reach the point easily.[26]" However, "tone may weaken as the bow constantly moves towards the fingerboard; and most bow strokes feel best when the string is not sloping down away from the bridge. In addition, playing with a high scroll throws the weight of the instrument into the body instead of into the left hand, which then feels lighter."[27]

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[25] Ibid.

[26] Ibid.

[27] Simon Fischer, "Basics," *The Strad*, February 2008, 2, https://www.simonfischeronline.com/uploads/5/7/7/9/57796211/200_holding_the_violin.pdf

The term "tilt" in the violin refers to the angle at which the instrument is held in relation to the player's body. This angle significantly influences the level of the bow arm and the overall physical condition. Fischer describes:

> The more tilted the violin the easier it is to play on the G string, but the worse it is to play on the E string because the bow is too vertical. Then it feels as though you are bowing against the side of the string. The string lends no support to the bow, and the arm cannot relax into the string. The flatter the violin, the easier it is to play on the E string. The bow movement is more horizontal, the string supports the bow, and the bow arm can relax into the string. However, the flatter the violin, the higher the right arm has to play to reach the G string, in such bow arm level, power from the upper arm diminished. Also note how far the left arm has to be pulled in for the fourth finger to be able to reach the G string. Therefore, the exact position of the instrument does not have to be fixed rigidly, since what is most comfortable or appropriate in one passage may be less so in another. The best possible tilt is one where you can reach the G string easily enough, while at the same time having enough support when playing on the E string.[28]

Left hand finger placement and pressure:

Fischer clearly depicts an image that the violinist can shape their finger placement just simply by following his guidelines:

> Without the violin, hold the left hand in front of you in playing position, with the fingers in a naturally curved shape, do not use any muscular action to find this shape: make a straight line through the forearm, wrist and hand; position the forearm so that the hand simply 'sits' on the forearm without needing any muscular effort to stay there. Move one finger at a time, without any active movement in any of the other three fingers. Look at the angle made in the line from the back of the hand to the finger: it should change as the finger moves, without the hand moving whatsoever. The curve or shape of the finger should not change. The danger violinists must avoid is that they drop and raise fingers partly with the movement of the hand, rather than moving from the base joints which

[28] Ibid.

> is a less efficient way of moving the finger, one of the hallmarks of any good left hand is that the main movement of the fingers is from the base knuckle joints.[29]

The thumb:

The proper placement of the thumb on the violin has long been a subject of discussion among violin educators. Fischer's states,

> One approach to finding a natural thumb position is first to drop the hand to the side and relax it completely. Without the violin, quickly raise the hand into playing position. Keep the arm and hand completely relaxed and note the natural position of the thumb. Repeat, this time placing the thumb on the neck of the violin. This may be the best basic thumb position for your hand. It is so important to avoid squeezing together the thumb and the first finger, and the way to avoid that is to keep space open at the base joint of the thumb.[30]

The fingertips:

Fischer believes the specific part of the fingertip that touches the string influences the whole left hand and arm,

> The more the finger is placed on the left side of the fingertip, the more the knuckles are angled up; the more the finger is placed on the right side of the fingertip, the more parallel are the knuckles with the fingerboard. The hand placement varies according to the specific notes. The default should

[29] Simon Fischer, "Basics," *The Strad*, December 2008, 1, https://www.simonfischeronline.com/uploads/5/7/7/9/57796211/210_dec_freeing_the_left_hand.pdf

[30] Simon Fischer, "Basics," *The Strad*, April 1995, 1, https://www.simonfischeronline.com/uploads/5/7/7/9/57796211/046thumb.pdf

> set the knuckles neither at too much of an angle in relation to the fingerboard, nor too parallel to it, but at some natural point in between.[31]

Finger pressure:

Fischer believes that placing excessive pressure on the strings not only wastes the energy of one's fingers but also results in a heavy and slow sensation.

> There should be an immediate give as soon as a finger stops a note on the string. The hand tightens if the finger action is 'stop–press' rather than 'stop–release,'[32]

> The body works as a whole: tension in one area creates tension in other areas. If the fingers and thumb are over pressed, the base knuckle joints and the palm of the hand become tight. If the hand is tight the wrist tightens. If the wrist tightens the upper arm tightens, if the upper arm tightens the neck and shoulders tighten, and so on. Rather than trying to 'relax' the hand, aim for a feeling of the hand always being soft, constantly keeping a check on the following:
>
> 1. The fingers stop the string just enough to produce a clean note, without pressing further
> 2. The thumb counter-presses against the neck of the violin 'as much as necessary but as little as possible'
> 3. The fingers that are not on the string remain relaxed
> 4. The fingers do not squeeze sideways against each other
> 5. The base knuckle joints remain relaxed
> 6. The wrist remains relaxed
> 7. The upper arm does not pull in too far to the right
> 8. The violin is not squeezed hard between the shoulder and the chin [33]

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[31] Simon Fischer, "Basics," *The Strad*, August 2000, 1, https://www.simonfischeronline.com/uploads/5/7/7/9/57796211/110fingertips.pdf

[32] Simon Fischer, "Basics," *The Strad*, November 1998, 1, https://www.simonfischeronline.com/uploads/5/7/7/9/57796211/089release2.pdf

[33] Simon Fischer, "Basics," *The Strad*, December 1995, 1, https://www.simonfischeronline.com/uploads/5/7/7/9/57796211/054press.pdf

Fischer elaborately laid out instructions regarding left-hand posture and finger placement, ensuring that each detail was not only clear but practically applicable. His insights emphasized the importance of balance and relaxation, guiding violinists to achieve optimal dexterity. The demonstration video link provided below will demonstrate his principles.

https://youtu.be/lOfksas79bs?si=eaoXINwNlN_pE4Qi

Advantage

1. Violinists with short arm holding the instrument more in front, which prevents the arm from being overly stretched. This position facilitates a natural movement, allowing the bow to maintain a parallel with the bridge. Conversely, violinists with longer arms often position the violin more to the left, enabling a more natural motion.
2. Violinists with a short arm, with chinrest place the chin near to, or directly above the tail piece, allowing the violin to rest comfortably in front of the body. This makes access to the fourth finger easier, enhancing the performance ability.
3. The higher the scroll is angled up, the easier it is for the bow to approach the bridge, producing a richer intensity of sound; conversely, with a low scroll, the sound naturally decays.
4. The more the violin is tilted, the easier it is to play the lower strings, resulting in a richer sound quality than when the instrument is held in a flat position. This is

due to the vertical contact of the bow hair with the strings. Conversely, a flatter angle advantages playing on the higher strings.

5. I believe Fischer's guidelines on finger placement offer an excellent approach; violinists can follow his method step by step without the need to hold the violin. They can focus solely on their left hand, concentrating on the shape of their fingers and understanding their functions.
6. Regarding finger pressure, Fischer's advice 'stop-release' cultivates an elastic finger action that provides significant advantages for fast passages. Furthermore, this technique promotes finger relaxation and saves energy during extended performance

Consideration:

1. Violinists with short arms with chinrest that place the chin near to, or directly above the tail piece: It is important that the width of the chinrest extends all the way to the tailpiece, ensuring that the tailpiece itself is not pressed directly.
2. The higher the scroll is angled up, the down bow stroke must be carefully directed upward; otherwise, the sound will turn *Ponticello*. Conversely, with a lower scroll, one must ensure the bow does not slip toward the fingerboard.
3. The more the violin tilts, the more the left hand supinates, guiding the elbow to shift leftward. This positioning of the left arm influences the direction of the fingers, which fall and release with a slight side-to-side motion. When the violin is held flatter, the left arm tends to angle toward the right side to access

the lower strings, causing the fingers to fall in a more vertical direction.

CHAPTER 2

Introduction and Intention：The Left Hand

When playing the violin, the propagation of sound and the execution of techniques, like the engine and transmission of a car engaging all components to function in harmony, each technique a player executes requires both hands to work together in perfect synchrony. Tension in the left hand can cause tension to the right hand, and vice versa. Interestingly, throughout my learning journey, I have often observed that players are more likely to discuss left-hand skills than those related to the right hand. Conversations often include how to release tension in the left hand, how to achieve better intonation, and how to improve vibrato, among other concerns.

One reason that many violinists tend to focus more on the left hand than the right, in my perspective, is that the immediate connection between the left hand and the instrument facilitates a quicker perceptual response to the player's movements. Second, the range of activities executed by the left hand on the fingerboard is narrower than the expansive movements of the bow arm. Furthermore, the interaction between the individual fingers of the left hand involves significant complexities, in comparison to the use of fingers in the bow hand. Consequently, the left hand is more prone to create tension. Third, holding the violin demands a resistance to gravity, the left-hand functioning as a counterbalance to the pressure of the bow, allowing the instrument to remain in the midair with stability. These considerations lead to the conclusion that it is

essential for a player to cultivate their left hand on a stable foundation, which is crucial for achieving success in violin playing.

Through the examination in the previous chapter, we can see the evolution of pedagogical practices in the master's treatises, transitioning from traditional, simplistic rules to the more nuanced methodologies that characterize today's educational institutions. This progression provides perspective for teachers skillfully employing more adaptable analytical methods to address and resolve the various challenges, particularly when working with players possessing different body types.

In the second chapter my intention is to provide the concepts of the foundation for a small left hand, that the renowned violin masters may or may not have been touched, along with guidelines based on my experiences with difficulties I faced during my studies. One significant realization that emerged from my research is that many violinists do not comply with guidance from the treaties, but they find their unique way to play the violin. Mark Steinberg, serving as the first violin in the Brentano Quartet holds the violin in an extremely descending position, with his chin placed on the rear edge of the chinrest. Worldclass soloist Itzhak Perlman often has his thumb bent outward while playing. On the other hand, I have been dejected for many years due to unsolved issues using my left hand, leading me to conclude that I must find a way to part from the traditional approach. My curiosity drives me to delve into physical execution and structure of the left hand. I am eager to share my research with violinists, providing insights into the left-hand posture, finger function, and offer a series of exercises. These concepts are not inventing a new way to play violin; however, it may assist violinists to break out a traditional

method of thinking, creating greater understanding between you and the instrument. I believe only when you find your own optimal method will you get twice the result with half the effort, and you can immerse yourself more in the music without worrying too much about tension in your body.

Types of Small Left Hand

I consider a small left hand not only for the size of the hand but also may include short fingers with a narrow palm, an 'uneven' length of fingers, or additional webbing between the fingers. I will illustrate why these types of left hands face more technical challenges over the normal size of left hand.

Short Fingers with a Narrow Palm

For violinists with short fingers and narrow palms, the primary concern lies in the execution of the third and fourth fingers. The limited length of their fingers might compel them to adopt an uncomfortable left-hand position to achieve technical precision. If violinists possess short fingers but a wider palm, such as Daniel Phillips or Ida Kavafian, they may find the execution of these fingers less problematic, as the wider palm covers a greater range of intervals. I often see violinists with short fingers and narrow palm struggling with techniques such as finger extension, double stops and chords. While some of these challenges can be solved by adjusting the posture of the left hand or arm,

unfortunately, certain techniques such as playing tenths, chords with overlapping fingers or double-stopped artificial harmonics present incredible challenges.

“Uneven” Length of The Fingers

Human fingers are naturally shaped unevenly; "uneven” refers particularly to one or two fingers that vary significantly in length. For example, there exists a significant length difference between my second, third, and fourth fingers. This unique length often creates tension at the tips of my second and third fingers each time I lower my fourth finger onto the strings. The stronger I play with my fourth finger; the more tension accumulates in the tips of the second and third fingers. Conversely, if I apply less pressure with the fourth finger, it results in a harmonic sound that produces a shrill tone. I have experimented with using the fleshy part of the second and third fingertip, yet this placement makes it difficult for my fourth finger to reach the notes on the strings.

Webbed Fingers

Webbed fingers can affect the relaxation of the third and fourth fingers, restricting the elongation between each finger. The greater the webbing, the more tension builds at the base knuckle region. Furthermore, whenever the higher finger shifts up with a whole step of interval, it can cause the neighbor’s lower finger to slip a small distance, resulting in uncertain intonation. This presents a range of technical challenges, such as achieving unison across different strings, executing sixths in double stops, or passages that require extending the fourth finger, among others.

Skeletal Structure of the Hands

Understanding the bone diagram and the mechanics of the skeleton system can significantly enhance a violinist's awareness of their own bodily framework. This awareness allows them to respond sensitively to the body's signals during playing, enabling for precise adjustments. Moreover, they may identify certain movements that are unnecessary or even harmful to their bones. For violinists with smaller hands, a deeper understanding of their skeletal structure may assist them in discovering their unique approach to playing. Furthermore, this knowledge will benefit most violinists by helping them establish a stronger foundation.

The Bones and Joints

The hands possess a remarkably intricate and delicate structure, comprising a total of 27 independent bones. These bones are classified into three primary sections, each of which contains a multitude of smaller fragments.: carpals (the wrist) with 8 carpal bones, metacarpals (palm) with 5 metacarpal bones, and phalanges (fingers) with 14 phalanges bones. (Fig. 1). All these sections support muscles and joints, leading the hand to a great range of movement and precision.

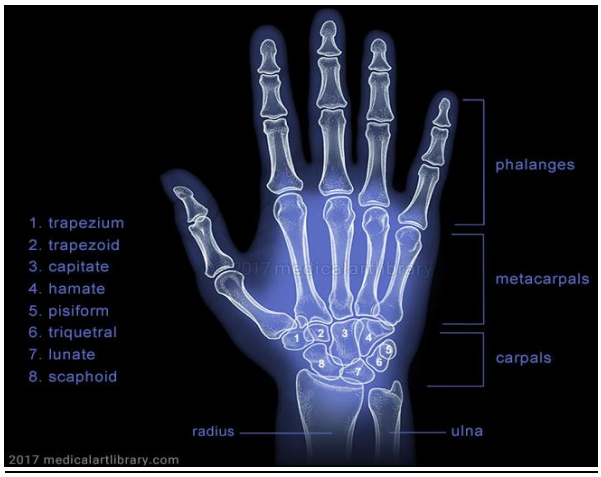


Figure 1. The Bone and Joints

The main knuckle joints are formed by the connections of the phalanges to the metacarpals. These joints are called the metacarpophalangeal joints *(*MCP joints). (Fig. 2). The MCP joints work like a hinge when you bend and straighten your fingers and thumb.

The three phalanges in each finger are separated by two joints, called *interphalangeal joints* (IP joints). The one closest to the MCP joint (knuckle) is called the *proxima*l *IP joint* (PIP joint). (Fig. 3). The joint near the end of the finger is called the *distal IP joint* (DIP joint). The thumb only has one IP joint between the two thumb phalanges. The IP joints of the digits also work like hinges when you bend and straighten your fingers and thumb.[34]

[34] Medical Marketing Group, LLC. "*Hand Anatomy*." South Mountain Physical Therapy, 2003. https://www.southmountainpt.com/Injuries-Conditions/Hand/Hand-Anatomy/a~280/article.html.

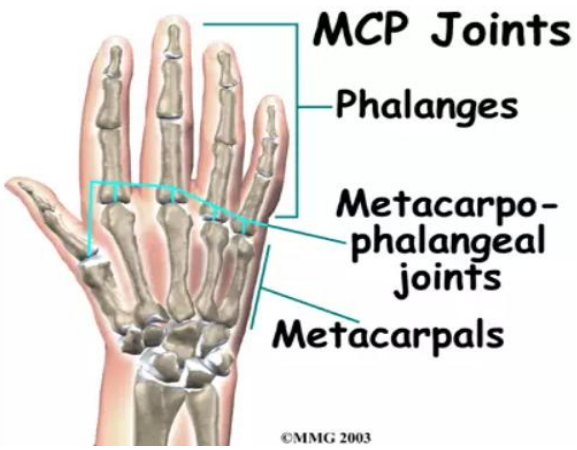


Figure 2. Metacarpophalangeal Joints

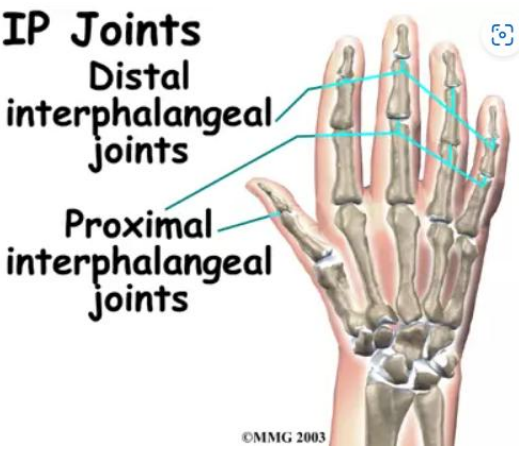


Figure 3. Phalanges

The joints of the hand, fingers, and thumb are covered on the ends with articular cartilage. (Fig. 4). This white, shiny material has a rubbery consistency. The function of articular cartilage is to absorb shock and provide an extremely smooth surface to facilitate motion. There is articular cartilage essentially everywhere that two bony surfaces move against one another or *articulate*.[35]

[35] Ibid.

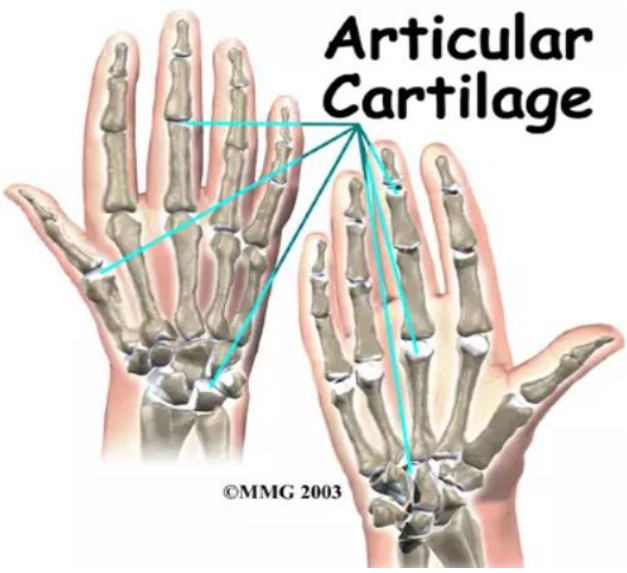


Figure 4. Articular Cartilage

Ligaments

Ligaments are tough bands of tissue that connect bones together. (Fig. 5). Two important structures, called collateral ligaments, are found on either side of each finger and thumb joint. The function of the collateral ligaments is to prevent abnormal sideways bending of each joint.[36]

In the PIP joint (the middle joint between the main knuckle and the DIP joint), the strongest ligament is the volar plate. (Fig. 6). This ligament connects the proximal phalanx to the middle phalanx on the palm side of the joint. The ligament tightens as the

[36] Ibid.

joint is straightened and keeps the PIP joint from bending back too far (hyperextending). Finger deformities can occur when the volar plate loosens from disease or injury.[37]

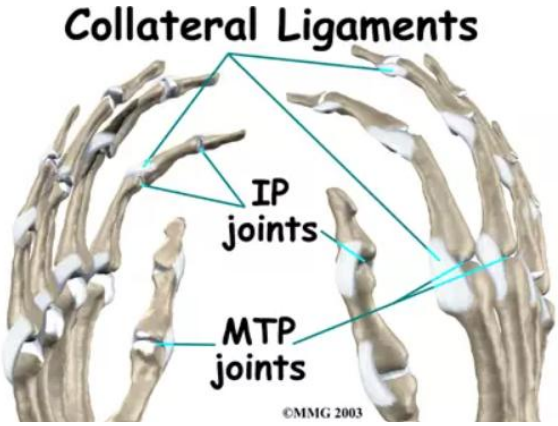


Figure 5. Ligaments

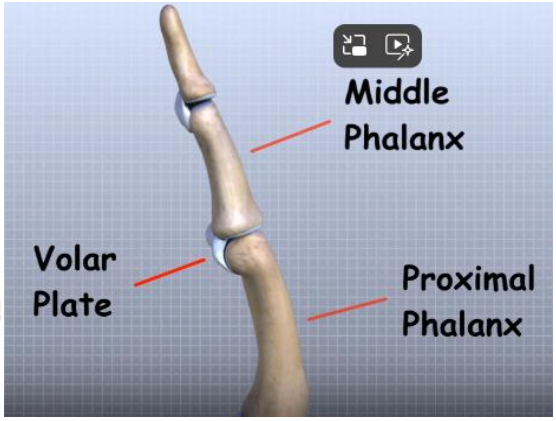


Figure 6. Phalanx and Volar Plate

Muscle Anatomy of Hands

The intrinsic hand consists of four distinct muscle groups: the thenar, hypothenar, lumbrical and interossei. Within this intricate structure lie more than thirty muscles, collaborating in a remarkably complex manner. "Many of the muscles that control the hand start at the elbow or forearm. They run down the forearm and cross the wrist and hand. Some control only the bending or straightening of the wrist. Others influence motion of the fingers or thumb. Many of these muscles help position and hold the wrist and hand while the thumb and fingers grip or perform fine motor actions."[38]

[37] Ibid.

[38] Ibid.

The Thenar and The Hypothenar Eminence Muscles

Two groups of more powerful muscles in the hand itself make up the thenar eminence (at the base of the thumb) and the hypothenar eminence (controlling the movement of the little finger). Among other things, the thenar muscles enable the thumb and the tips of the four fingers to touch each other. A separate muscle (the adductor pollicis) is used to pull the thumb towards the palm. The hypothenar eminence muscles are mainly used for sticking out the little finger and pulling it inwards again, and for tightening the skin that covers the hypothenar eminence. (Fig. 7).[39]

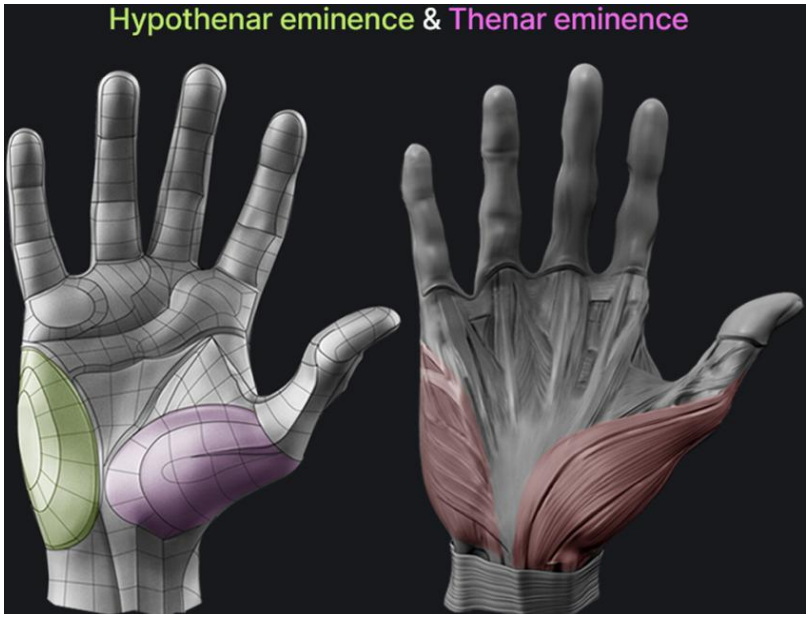


Figure 7. The Thenar and The Hypothenar Eminence Muscles

[39] Institute, Quality and Efficiency in Health Care. "In Brief: How Do Hands Work?" InformedHealth.org [Internet]., January 23, 2025. https://www.ncbi.nlm.nih.gov/books/NBK279362/#i2223.gi-sources.7.

Lumbricals

The lumbricals of the hand are four thin, worm-like muscles that help bend the metacarpophalangeal joints and extend the fingers. (Fig. 8).[40]

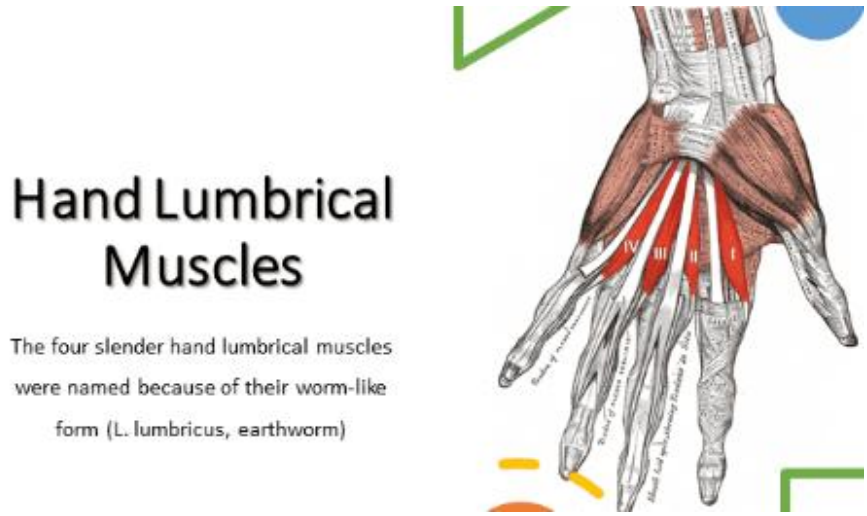


Figure 8. Lumbrical

Interossei

The interossei muscles are intrinsic muscles of the hand located between the metacarpals. They consist of four (or three) palmar and four dorsal muscles that, respectively. (Fig. 9). These muscles are responsible for finger adduction and abduction.[41]

[40] Ibid.

[41] Valenzuela, Michael. "Anatomy, Shoulder and Upper Limb, Hand Interossei Muscles." StatPearls [Internet]., July 24, 2023. https://www.ncbi.nlm.nih.gov/books/NBK534772/.

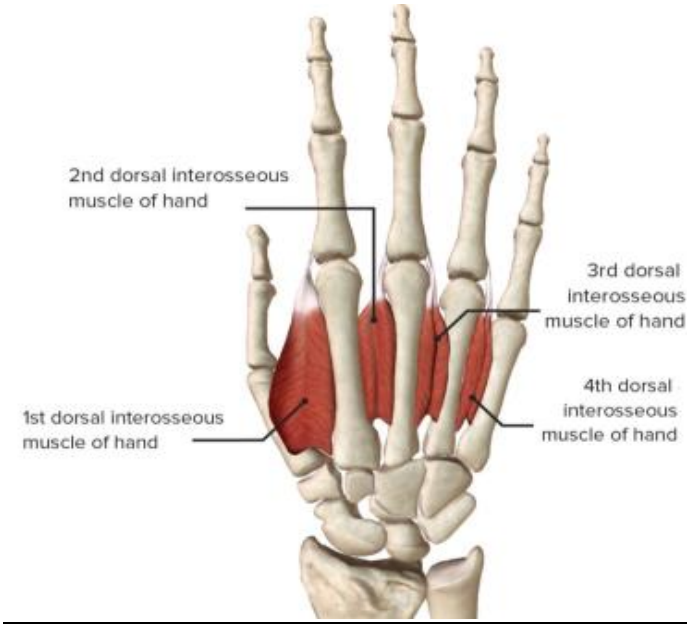


Figure 9. Interossei

Proper Violin Position

From the past century to the present day, there are many treatises that have discovered a natural posture for holding the violin successfully. However, beyond those elaborate treatises, I will share my thoughts on achieving the proper violin position, with insights drawn from my daily practice and teaching experiences.

To maintain a steady violin position with natural posture in the left hand, I suggest an image of geometric figures which consist of one large triangle, and two small triangles. The steady of holding the violin does not imply a tense hold; rather, each point of the triangle must be secure, allowing the transverse line connecting these points to create a stabilized bar effect, leading to a state of relaxation.

The large triangle formed by three bars extends from the left shoulder to the elbow, and from the elbow to the left hand, and the violin itself becomes a bar, extending from where the left hand grips the violin's neck to the shoulder region. (Fig. 10) Hand to the shoulder. It is crucial that the elbow is in alignment with the hand, avoiding any bending of the wrist in any direction, bending the wrist breaks the balance. Violinists who use a shoulder rest should consider that most shoulder rests are constructed as a single piece, covering the entire area from shoulder to collarbone. Thus, the entire section beneath the shoulder rest functions as a unified point of the triangle. Violinists, without using a shoulder rest, find that their collarbone serves as a substitute, forming a unified point of the triangle. However, in the absence of shoulder rest support, the shoulder must remain relaxed; the gap between the shoulder and the instrument may produce a potential to lift the shoulder, which creates unnecessary tension. Violinists, with cushions positioned at the back of the instrument, discovered that the cushion transformed it into a unified point of the triangle.

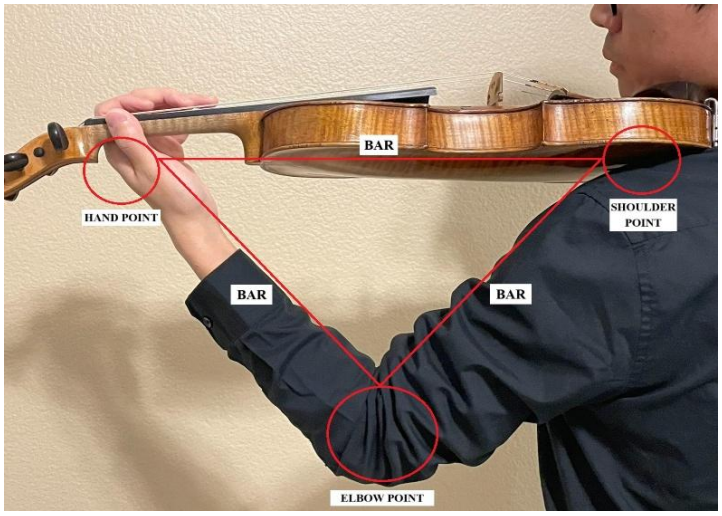


Figure 10. Large Triangular Shape

This large triangle configuration may slightly alter when executing techniques such as multiple chords playing, as the fingers set to the strings in a complex manner, sometimes allowing the wrist to bend. However, with other left-hand techniques such as string crossing, changing positions, or double stops, the structure of the triangle should remain unchanged. When a player embarks on this approach for the first time, it is crucial to envision the geometric figure of the triangle, identifying each point at the shoulder, elbow, and hand. They should feel the violin as a light piece of wood resting from the shoulder down to the hand, with the elbow providing support. One must never hesitate to test stability until they cultivate a sense of comfort and steadiness within the triangle's structure.

The second triangle is formed by the wrist's carpal bone, the thumb, and the base knuckle of the index finger. (Fig. 11) The cross section of the violin's neck itself serves as a horizontal bar, extending from the thumb across to the neck of the violin, ultimately reaching the index finger’s base knuckle. In this configuration, the thumb functions as one point of the triangle, providing support on the left side of the violin neck, while the base knuckle of the index finger stands as the opposing point, forming the right side of the triangle. The crucial fact regarding the thumb is that, given the variation in thumb lengths among violinists, each player experiences a different sensation at the thumb's point. 1. When the thumb is positioned over the neck of the violin, it provides a sense of greater stability, as the neck rests upon the first dorsal interosseous muscle of the hand, naturally widening the distance between the base knuckles of the index finger, and the thumb. (Fig. 12) 2. If the thumb is placed beneath the neck of the violin, the left and right

side of the triangle points get closer, causing the thumb and fingers to settle into a lower position. (Fig. 13). 3. When the base knuckles of index finger and thumb touch, this marks the point of the triangle from each side becoming the closest; resulting in the thumb and fingers being at the lowest position. (Fig. 14). It is essential to explore all three holding positions to discover the one that best accommodates your hand. My suggestion for violinists with a longer thumb may find it more comfortable to position the neck of the violin near the second knuckle of the thumb. Conversely, those with a shorter thumb should place the neck above the first knuckle, closer to the fleshy part of the thumb, to establish a steady supporting point. The last point in this hand's triangle is the wrist metacarpal, serving as the foundational anchor that creates an image of a reverse triangle configuration. Two bars (bones) emerge from the metacarpal: the first extends from the wrist to the base knuckle of the index finger, while the second reaches from the wrist to the thumb. With the metacarpal and carpal bones directly connected to both the thumb and the base knuckle of the index finger, a stable triangle is formed, enabling the player’s left hand to execute a variety of techniques.

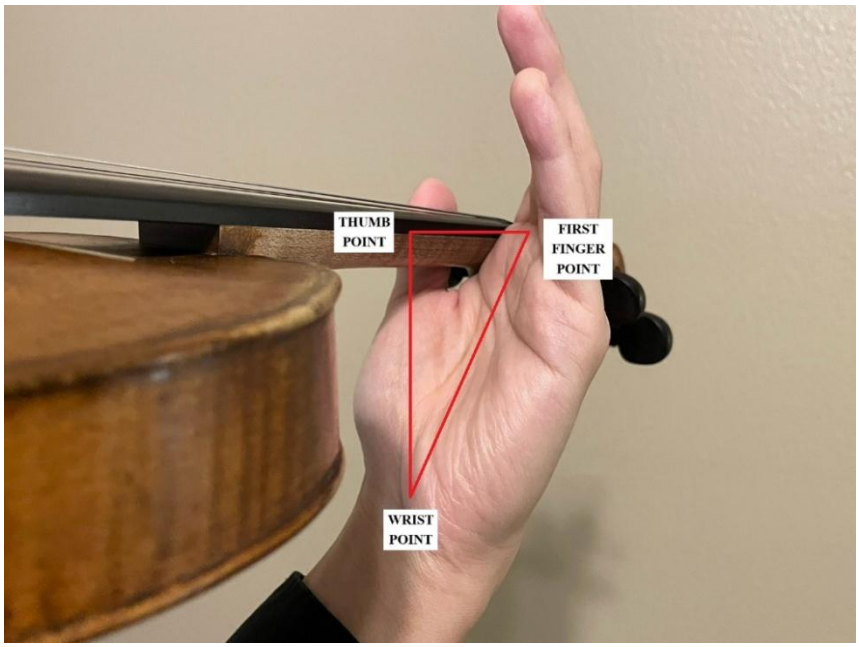


Figure 11. Left-Hand Triangular Shape 1

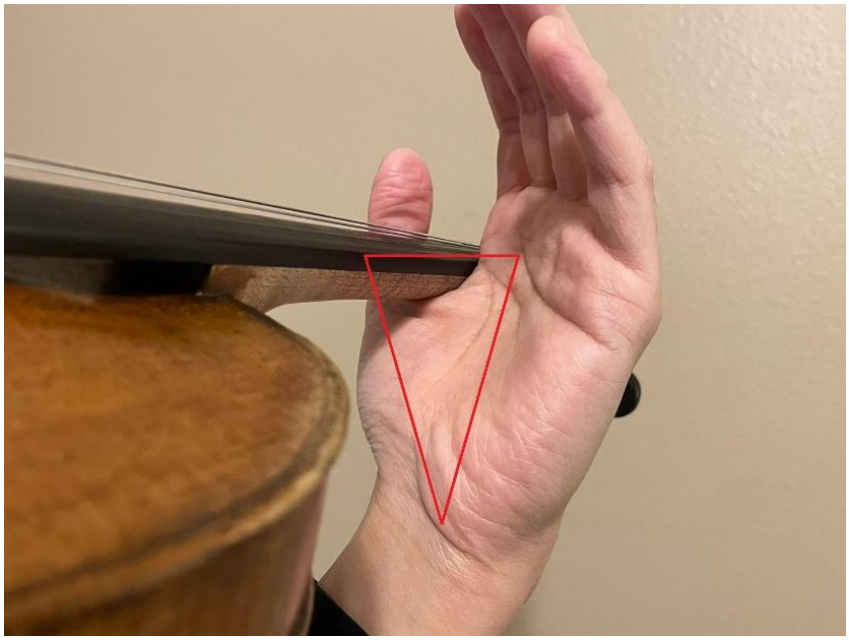


Figure 12. Left-Hand Triangular Shape 2

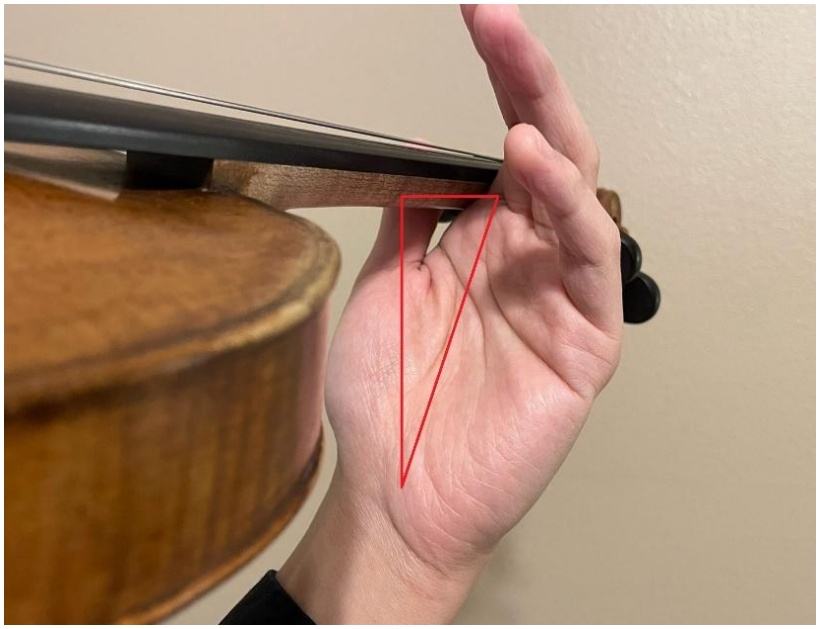


Figure 13. Left-Hand Triangular Shape 3

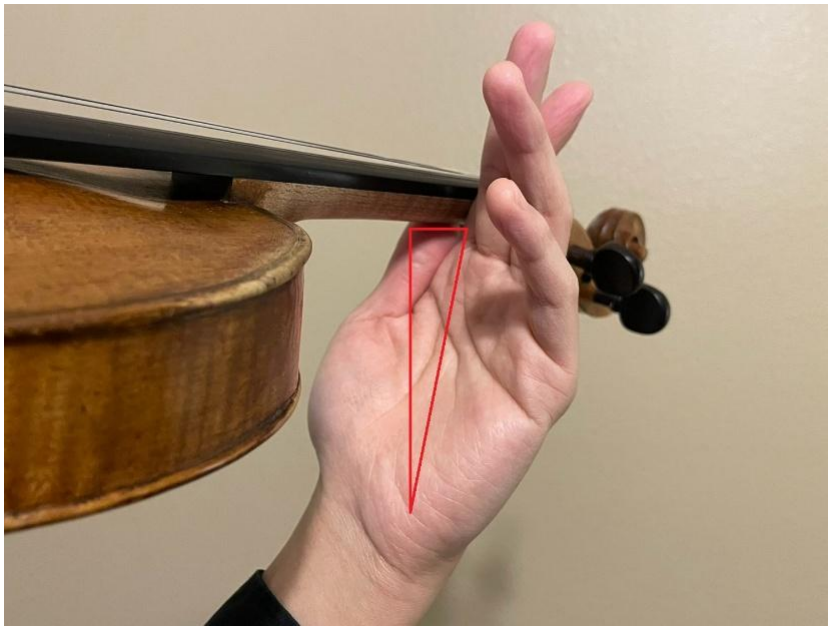


Figure 14. Left-Hand Triangular Shape 4

The third component forms a narrow triangle defined by the left shoulder, collarbone, and chin. (Fig. 15). Whether violinists employ a pad, a shoulder rest, or play without any support at the back of the violin, the points of the shoulder and collarbone must align horizontally, establishing the foundation of this triangle. Raising the shoulder point alters the transverse line of the triangle into a tilted shape, creating instability and resulting in muscle tension. However, when violinists turn the elbow inward to the body or shift it to the left, they do not disrupt the foundation of the triangle; it continues to provide stable balance. The only time this foundational line compromises is when the shoulder is drawn upwards.

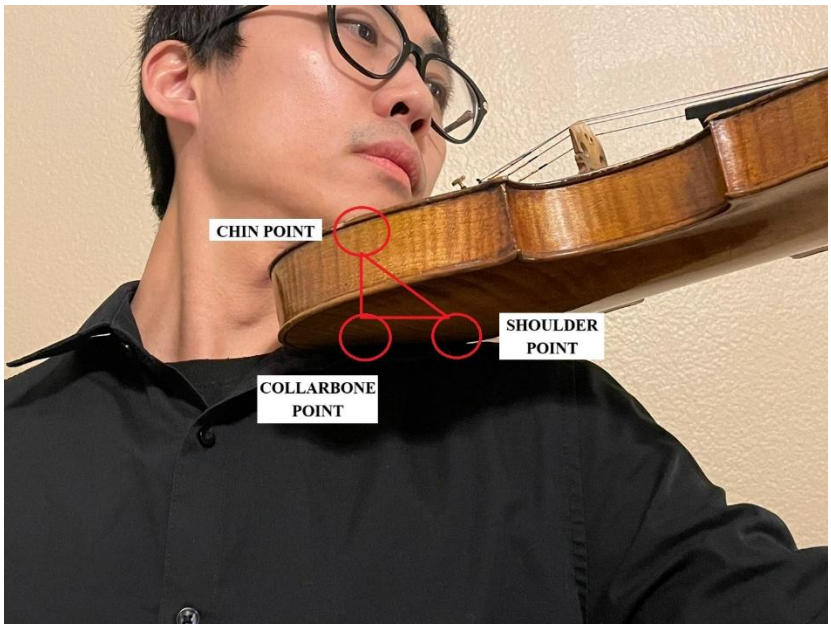


Figure 15. Small Triangular Shape

There exists a particular exception for violinists with shorter arms who position the violin towards the very center of the body. In such situations, the shoulder does not

come into contact with the instrument, which stops its ability to provide support, thus, the triangular relationship must be transformed to the left hand, collarbone, and chin.

The chin point provides several possibilities. If violinists rest their chins directly upon the tailpiece may feel heavy in the center of the body and light in the shoulder region. transforming the triangle into a right-angled shape. The left arm must shift further left to achieve better balance.

When violinists position their chins to the left side of the chin rest, the violin's tilt flattens out, closer to parallel with the ground, they experience the chin point hovering above the center of the collarbone, forming a standard triangle that provides well-balanced support from both sides.

By resting the masseter muscle or upper jawbone on the chin rest, they may feel an increased weight on the shoulder side, resulting in a left-sided triangle, necessitating a rotation of the arm directly beneath the instrument or towards the elbow to bring it closer to the center of the body. Given this information, whether a violinist has a long or short neck, it is essential to evaluate the balance between the shoulder, collarbone, and chin, adopting feedback from the body's tone to discover the most comfortable triangle points that will enable proficiency in various left-hand techniques.

Finger Placement and Pressure

The examination of the treatises in the first chapter establish insights for setting the fingers on the fingerboard. Finding ideal finger placements and pressure is complex as it

requires each finger to be independent, collaborate, elongate, alternate in different directions, and balance tension and relaxation. As you delve into this topic, I encourage you to approach it with both thoughtfulness and flexibility, taking care to examine the instructions, which diverge somewhat from traditional methods. I believe that violinists with smaller left hands regarding finger placement and pressure should remain open to discovering their unique ways of playing.

The Natural Left-Hand Shape

To achieve a natural left-hand shape for playing the violin, examine the hand position as you relax naturally with your arm and hand hanging from the shoulder on the side of your body. Without lifting the shoulder and upper arm, draw the forearm up by bending the elbow to a 45 to 60 degree angle, and turn the palm towards the upper chest. Allow the fingers to rest with a natural downward curvature shape due to the gravity. The thumb may not curve like other four fingers, because the length of the thumb is shorter than others, and the base knuckle of the thumb belongs to part of the carpal bone which provides a stronger support to the fingertip. Once the violin is held with the left hand, the curvature of the fingers should not change at all.

The Thumb Placement

The thumb, as one of the members of the finger family, interestingly, is the only digit that does not directly engage with the strings during the execution of techniques. Yet, its

importance is equal to that of the other fingers. If the thumb is strained, it inevitably impacts the dexterity of the other four. Traditional treatises emphasize the thumb should align either with the first or second finger: Leopold Auer-put second finger on note F, on the D string, in the first position, thumb should in the self-same line; Carl Flesch- support of the neck by the thumb on one side and the third joint of the index finger on the other. Undeniably, this works for most average-sized hands. However, it may or may not be ideal for players with smaller hands.

My perspective on thumb placement diverges from traditional approaches; there should be no rule for its location. The thumb should operate with a sense of freedom, working in harmony with the other four fingers to execute various techniques. Rather than the thumb being limited to a specific placement, violinists should focus on the thumb's pressure and its role as a supporting point. Whether it aligns with the index finger or the second, or is positioned above or below the fingerboard, it is crucial that the thumb should function as a stabilizing balance for the other four fingers.

I recommend that violinists with shorter fingers should employ the fleshy tip of the thumb, positioning it either at the center or slightly to the right, while directing it downward towards the left side of the violin neck, ideally in the seven to nine o’clock range. It is wise to make multiple attempts to achieve balanced pressure between the thumb and all four fingers. The crucial aspect lies in sensing the leverage between the thumb's point and the base knuckle of the index finger. Always remain open-minded and prepared for unexpected sensations or outcomes with the thumb, as you may find that the position you deem most comfortable could differ from that of other players. For violinists

with smaller left hands, if the player aligns the thumb with the first finger, when the third and fourth fingers descend onto the string, it is helpful to intentionally shift the thumb backward to a half or whole step, assisting the little finger in extending. When changing strings with the left hand, the thumb must always synchronize with the forearm. When playing on the E string, both the forearm and thumb should turn slightly left; conversely, on the G string, they should angle to the right. There are various chords that necessitate the left hand to move in different directions: leftward, rightward, outward, and upward, therefore, the thumb should follow the direction of the wrist accordingly.

Finger Placement

With consideration to thumb placement as outlined above, I recommend the following to achieve good finger placement with a small left hand:

1. All fingers must be gently rested on the string playing with the pressure to produce a natural harmonic, rather than pressing the string into the fingerboard.
2. Place the fourth finger on the D string, note A, keeping the first three fingers in the air, then move the thumb around beneath the violin neck or the left side of the violin neck, feeling the best balance between the thumb and the little finger without the string down.
3. After finding the balance in the fourth finger, place the third finger on note G, with the first two fingers kept in the air. If the thumb feels tension in the second knuckle, the thumb may need to move forward to the violin scroll, while making

sure not to

raise the thumb above the neck of the violin.

4. Use the same method to find the best balance for the thumb and second and first fingers respectively. Be open-minded that the thumb should not be locked in a specific place, and make adjustments whenever you feel tension.
5. Setting all the fingers on the D strings, slowly press the string with all fingers simultaneously until fingers make contact with the fingerboard and suddenly release to the pressure of a natural harmonic.
6. Repeat the pressure exercise several times.

Additional considerations: the wrist and forearm must maintain alignment when the fingers engage with the strings. If violinists sense tension while pressing down on the strings with their fingertips**,** they may need to adjust the contact point of their fingertips by shifting to the left or right, re-positioning the thumb as all fingers have been reset. Finger placement is determined by the point of contact between the fingertip and the string. When the contact occurs toward the left side of the fingertip, it facilitates the first knuckle of the index and second fingers to tilt toward the strings. Meanwhile, the base knuckles of the third and fourth fingers maintain a greater distance from the neck of the violin. As violinists shift their fingertips toward the center to right, the left hand supinates, transforming all fingers into a “square” shape. This adjustment allows the index finger to create a smaller gap with the violin’s neck, resulting in the base knuckles of the four fingers being parallel to the fingerboard. The choice of hand shape for finger placement is

a significant consideration, as individual hand sizes vary. Improper finger positioning can result in increased tension in the hand, ultimately limiting one's technique.

Finger Pressure

One sentence often echoes in my mind while playing the violin: over-pressing the string is a risky action. Violinists who apply excessive pressure with their fingertips may risk severe injury to the nerves. But how much force is truly needed to press the string? Leopold Auer's treatises on finger pressure suggest that the pressure exerted by the finger must precisely match its physical strength. I find myself in agreement, yet curiosity compels me to ask: how can I precisely determine the strength of my finger pressure? Auer illustrated his point by flinging his finger above the string and then suddenly letting it drop without thought or preparation. I have tried this technique, and it proved a valuable way to explore my own physical limits. Another effective aspect to determine the proper fingertip pressure involves finding both the maximum and minimum pressure applied to the string, finding a range in between, which helps develop a better sense of pressure.

There are several reasons for over-pressing with the fingertip. The first factor that comes to mind is habit. From the very beginning, violinists should be frequently reminded by their instructors not to over-press the strings. Once excessive pressure becomes a habit, the player will struggle to control their power and will require retraining to regain the sensitivity of their nimble fingers. The second factor is a lack of information.

Players may press the strings, feeling discomfort in their fingers, but they cannot quite understand why this happens or how to adjust. In such cases, nothing is more beneficial than doing research on the relevant issues to find their own path to resolution. Lastly, there is a lack of specific training. Not all technique books are effective in cultivating dexterous fingers. Etudes such as Kreutzer No. 9 and No. 15, along with Sevcik Book 1 exercises, are particularly aimed at enhancing finger dexterity. The more one plays these exercises, the pressure of mastery is felt in the fingers.

One aspect concerning finger pressure relates to the contact point of the fingertip**,** whether contacting on the left, middle, or right side. Some violinists advocate that using the same side of the fingertip can be advantageous for finger movements, as the left hand remains consistently aligned with the wrist, allowing the fingers to function in a straightforward manner. However, I believe that violinists should learn to utilize all three placements. The complexity of left-hand techniques demands that players execute various combinations of fingertip contacts. For instance, at a double stop fourth, the lower finger may connect on the left side while the higher finger touches the middle of the fingertip. (Fig. 16)

Figure 16. Multiple Fingertips Contact Shape 1

Another example is placing the first finger on the note A natural on the G string, the second finger on the note F natural on the D string, the third finger on the note D natural on the A string, and the fourth finger on the note B natural on the E string. In this chord, the third finger contacts the middle of the fingertip, while the fourth fingertip makes contact on the right side (Fig. 17). Even when discussing the same string, the length of the fingers can lead to varying fingertip contacts. However, a violinist with particularly long fingers may approach this differently.

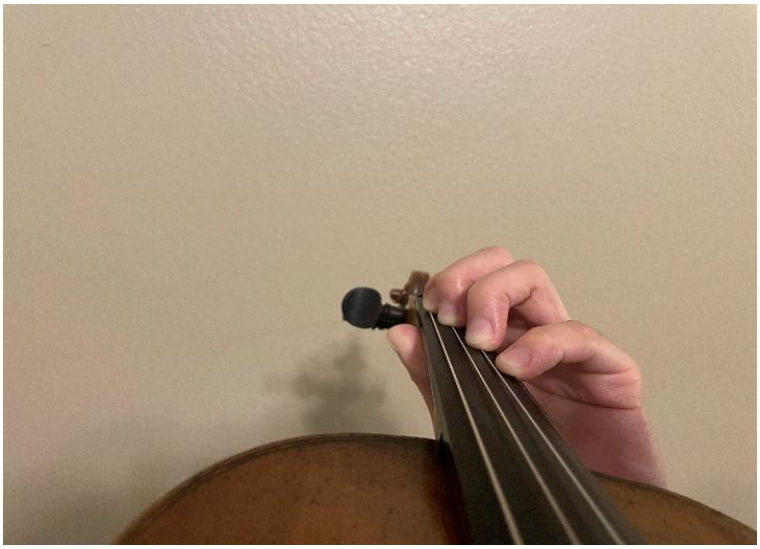


Figure 17. Multiple Fingertips Contact Shape 2

The Left-hand Tension

Tension has a reciprocal and transmitting effect. If the body gets tense, it affects the holding the violin; if holding the violin is tense, it restricts the left arm and hand; if the left hand is tense, it diminishes fingers' function, which in turn restricts the dexterity of the fingers; if the fingers are tense, the sound quality will inevitably suffer. I regard left-hand tension as "the greatest opponent," and since the function of the left hand is complex, it is hard to diagnose. I played with left-hand tension for a decade in my youth and was still able to execute pieces like the Tchaikovsky concerto or the Paganini caprices. Consequently, my teachers believed that I did not have much tension in my left hand. Regrettably, it was only I who understood the extent of my suffering, the pain and injury endured to bring a piece to completion. After many years of retraining my left hand, I've become sensitive to tension, as my self-consciousness tends to focus more on relaxation rather than on tightness. Even when certain chords or vibratos demand tension

to achieve the desired technique or musical style, I consciously shift to a relaxed condition of my hand in the quickest way possible. To address the tension on the left-hand, here are some insights:

Self-diagnosing: Violinists must become their own doctors. When tension is in the body, the first observation needs to come from within; violinists will instinctively know which part—be it hand, or fingers experiences the strain. They should then retrace their steps, repeating the process to identify the source. If tension occurs accidentally, it may not be a cause for concern, but if it happens frequently, the player must sensitively diagnose the issue. This self-diagnosis requires executing every movement of the entire process with a sensitive focus on the details.

Tailored method: when a player finds themselves at a loss for solutions despite understanding the underlying issues, they may need to seek guidance from instructors or professionals. Their proposed solutions may be specifically tailored to your needs, but even if they aren't, their insights can encourage you to reevaluate your challenges.

Consciously to relax: it is necessary to maintain rationality in playing, to be sensitive to the signals sent by the body and adjust as needed. Often, violinists must intentionally compel this process: when your legs tighten, consciously shift your feet a step; when your bow arm grows tense, remind yourself to let it relax, and so forth.

Left hand posture: Often, tension tends to remain in the left hand after executing a demanding series of left-hand techniques. Therefore, it is essential to check your hand

posture: ensure that thumb does not feel pressed, or the fingers are not sideways squeezed, and that all alignments are properly adjusted.

Body posture: violinists performing with a stiff body posture inevitably create tension within themselves, a little amount inhale and exhale, or movements of the body with the flow of the music will help to release the tension.

Unsteady holding: holding the violin steady while allowing the body to move freely is essential, as an insecure grip can create conflicts between the body and the instrument. Prioritizing the adjustment of your hold is crucial, for neglecting this will ultimately impact one’s left-hand skills.

Stiff muscles: almost every muscle in the body requires a proper warm-up before practice or taking the stage. This is especially for violinists in colder climates, who often need additional time to prepare. Stiff muscles lead to tension, and that tension can result in pain or injury, and produce a threat to one's health.

CHAPTER 3

Exercises Series

The exercise series trains the basic understanding of the left-hand mechanism, enhancing the self-consciousness abilities for the left hand, and addresses approaches that are designed for violinists with a small left hand. Each exercise is attached with corresponding videos to demonstrate and explain the details of execution, along with selected examples from the repertory.

Exercises for Hand Muscles

The hand muscles exercises will create the strength, relaxation and extension of the hand abilities. They help to prepare a player's hand for playing, and are executed without holding the violin. Following these exercises, it is advisable to massage or shake the hand to a relaxed condition, because some exercises may create tension.

Numerous hand muscle exercises exist, though not all are beneficial for violin playing. However, I have identified five exercises that can be deemed particularly helpful for violinists.

Hook, Elongation and Expansion: this exercise consists of three parts, each involving distinct movements. Hook: bend all fingers, including the thumb together, positioning the base knuckles inward like a hook. Hook to elongation: straighten all fingers from the bent

position, including the thumb, so that they are fully elongated. Expansion: fully open all fingers from the elongated position, allowing the muscles of the hand to expand. Repeat this entire process several times until the hands feel tired and be sure to give them a massage after the exercise.

Dynamic spider fingers exercise: dynamic spider fingers is a stretching exercise where you fully open both your hands and fingers face to each other, and placing them perfectly with pairs, pushing them simultaneously, thus the thumb, palm and fingers muscle will stretch effectively

The tenth extension exercise: placing the left hand in a playing position, the fingers naturally curve. Reach back with your index finger without breaking this curvature; this action stretches the base knuckle of the index finger muscle. Meanwhile, the little finger extends to the player, activating the base knuckle muscles of that finger. Envision playing a tenth double stop shape, separating the first and little fingers simultaneously.

Thumb dorsal interossei stretching exercise: with the left palm directed towards the player, supinate the left hand so that the thumb points away from the body. Use the other hand to gently stretch the thumb downward.

Finger engagement exercise: raise the left hand into a playing position without holding the violin, engaging the thumb and little finger with the fleshy part of the fingertip. This action will activate the thumb's Dorsal Interossei and Flexor Digiti Minimi muscles simultaneously. Follow this by engaging the thumb along with the third, second, and first fingers, activating the first Dorsal Interossei and lumbrical muscles.

Demonstration video link: https://youtu.be/QxCRQPFBsbM?si=2s070g0mNDW_Cjjc

Vertical and Horizontal Movement of the Finger

There are two distinct finger movements that are executed by the left hand when playing the violin.

-Vertical movement: occurs when the finger drops to the string or lifts from it.

- Horizontal movement: occurs when a finger slides or shifts from side to side.

My intention for this exercise is to visualize the fingers without the violin in hand first, allowing the player to closely observe and concentrate on their finger movements. This facilitates self-analysis and provides more controlled practice. The Vertical finger exercises consist of four levels, each increasing in difficulty. To complete the process, the player must utilize the right forearm as if it was the neck of a violin. Once the various levels have been mastered, the next step is to transform the entire process onto violin.

The horizontal finger exercises consist of two parts: the first exercise involves moving the fingers side to side, while the second focuses on finger sliding. When the player engages in both the Vertical and Horizontal exercises, it is essential to emphasize the motion of the fingers, attentively sensing the feedback from the fingers, and prioritizing the mental control over than the body control.

Exercises for Vertical Finger Movement (without violin)

Level 1: let a single finger drop in sequence onto the right forearm; as it lands and lifts, ensure the motion is effortless and relaxed.

Level 2: place your fingers in a sequence upon the right forearm, ensuring that each preceding finger remains in contact with the skin, relaxed in its position. Once all fingers are positioned on the forearm, lift each one back in reverse order.

Level 3: positioning each finger upon the right forearm, lift with a group of fingers in unison, fingers stay relaxed in the air, without squeezing the thumb, or over pressing the remaining fingers.

Level 4: placing all fingers upon the right forearm, lifting the first and fourth fingers, the second and third fingers remain in place, then letting the fingers fall back to the forearm. The second time, raising the first and third fingers while the second and fourth fingers stay, then dropping them back down. Finally, lifting the second and fourth fingers with the first and third fingers remains, for level 4, prioritizing the fingers guided by mental control is essential.

Demonstration video link:

https://youtu.be/V1HrVPkW-ZE?si=Rxzn2BAoSW_PeIry

Exercises for Vertical Finger Movement (with violin)

Demonstration video link:

https://youtu.be/RZcYnMNqJnQ?si=MCeLAcsd4_19Yl3q

Exercises for Horizontal Finger Movement (with violin)

Side to side: imagine a crab moving sideways, the first and second fingers gently resting on the right forearm. As the second finger drops to rest on the string, the first finger must then kick off the second, lifting it away. The remaining fingers can follow this same pattern. All the fingers move in a half-step sequence, avoiding any squeezing against one another with sideways pressure. When the fingers shift, it is crucial that the lower finger directs the others, guiding them through both ascending and descending paths.

Sliding finger: position the first finger upon the string, and slide through the range from first to third to fifth position, then return the same way to the first position. For the second time, use both the first and second fingers; on the third time, bring three fingers together. Finally, let the four fingers glide together, separated by a

slight gap between each, maintaining their unified motion. When fingers glide, they must caress the surface with a tender touch, working as unison. The thumb and sliding fingers over the bent will make the shifting less smooth; do not apart the index finger from the violin neck too soon, for this will change the shape of the left hand.

Demonstration video link:

https://youtu.be/U3aPGduxI5w?si=XoMIWb_cdqHbYdNj

Finger Pressure Exercises

The finger pressure exercises encompass four distinct levels, each requiring controlled finger placement. Even at Level 1, where the pressure is of a natural harmonic, the player must maintain deliberate control to ensure relaxation. By the time one reaches Level 2, the maximum pressure indicates pressing the string all the way down to the fingerboard, effectively sealing the gap between the string and the fingerboard. It is important to note that this does not involve exerting the entire body's energy to press the string, as doing so would lead to pain in the fingertips, which constitutes unhealthy practice.

Level 1: Take off the thumb from the neck, allowing no pressure, then lightly touch the strings with the fingers, creating a shrill. Then, let the thumb return.

Level 2: Maximum pressure, ensuring no daylight is visible between the fingerboard and fingertip; Vibrato is an additional option.

Level 3: Add little pressure on Level 1

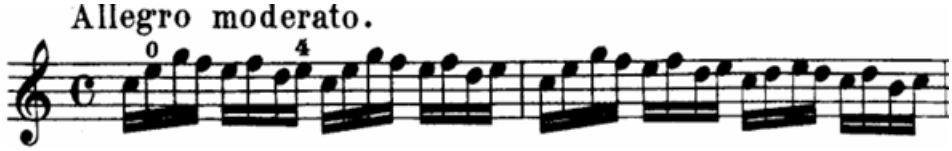
Level 4: Add little pressure to Level 3

Demonstration video link: https://youtu.be/G46QGD-BPqU?si=EiffWkcLqzkPB3ix

Progressive Fingered Exercise

This exercise is beneficial for use in any fast passages, helping players to assess their left-hand relaxation and control of finger pressure.

Example 1: Kreutzer 42 studies for violin, No.2



The first time, the violinist plays with the pressure of a natural harmonic, and the thumb remains in the air.

For the second time, apply a bit more pressure (harmonic-ish), just enough to produce the sound, with your thumb placing on the violin neck.

Third time apply more pressure to hear a normal sound.

Demonstration video link: https://youtu.be/s8H2DenRNt4?si=YzNfwKHEEsadHaa_

Positioning The Fourth Finger

The fourth finger exercises are specially designed for the violinist with small left-hand, aiming to find the best location for the fourth finger. When players process the exercises, I urge you to reflect on the information I shared regarding finger placement and pressure, as you may be curious about why my left hand carries a posture distinct from that of the average person. For those violinists possessed with the normal size left hand, these exercises can enhance their comprehension of the mechanisms of the fingers.

Locate the fourth finger position by using a half step from the second position:

Place the first finger on the note F natural in the D string**,** positioning all fingers together a half step on the string. Be sure to find a thumb placement that feels the most comfortable and balanced in relation to the fingers. Repeat this process to develop muscle memory.

Locate the whole step position of the fourth finger by using the second position:

Placing the first finger on the note F sharp in the D string, positioning all fingers in a half step along the string. Consequently, the little finger should rest in the spot designated for note A-natural. Then, extend the index finger back to the first position while maintaining the little finger on the same note. This action compels the first three fingers to stretch back, creating a whole step between the third and fourth fingers. Finally,

identify a position that feels most comfortable and balanced for both the thumb and fingers—this might represent the optimal shape for the fourth finger. Depending on the length of the finger, some players find that a straight shape for the little finger enhances their comfort.

Demonstration video link: https://youtu.be/vvarpYtR-6I?si=3BOKaH3AFfsJdom1

The Fourth Finger Strengthen Exercise

The little finger is governed by two muscles. The first muscle, known as the flexor digiti minimi (Fig. 18) resides on the outer edge of the palm. The second muscle, the fourth lumbrical, (Fig. 19) is connected to the inner side of the little finger bone. When the little finger rises, falls or lateral sways, these two muscles work in contracting and expanding to transmit force to the base knuckle and the little finger itself.

Figure 18. Flexor Digiti Minimi

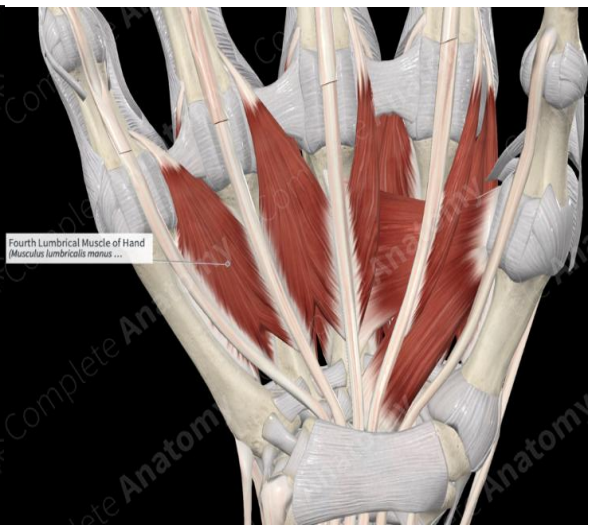


Figure 19. The Fourth Lumbrical

The fourth finger strengthening exercises consist of two main components: sideway extensions and vertical movements. The purpose of these exercises is to activate and enhance the two muscles of the little finger in the palm, offering greater support as the little finger moves.

Sideway Extension Exercises:

Applying pressure to the strings with the left side of the fingertip; when the little finger extends, it should also engage the same side of the fingertip. (Fig. 20, 21)

Figure 20. The Contact Point on The Left Side of The Fingertip 1

Figure 21. The Contact Point on The Left Side of The Fingertip 2

Applying pressure to the strings with the middle or right side of the fingertip; when the little finger extends, it should use the same side of the fingertip. (Fig. 22, 23)

Figure 22. The Contact Point on The Middle of The Fingertip 1

Figure 23. The Contact Point on The Middle of The Fingertip 2

Sideway extension exercises guideline:

1. Widen the first, second and third fingers to a whole step frame.
2. Keep the left-hand frame in the playing position.
3. Use a mirror to help monitor to see the movement of fingers and muscles.
4. Once the little finger begins to move, it must stay in contact with the string throughout the entire process.

Level 1: widen the left hand, and elongate the little finger to whole step up, then back. Envision the movement of the finger forced by two little finger muscles.

Level 2: using a rubber band, bind the third and fourth fingers just below the middle knuckle, and proceed with the entire process of Level 1.

Level 3: maintain a rubber band on the third and fourth fingers, climb approximately to the fifth position by whole steps, then descend back to the first position. For violinists with smaller left hands, lifting the index finger may assist in releasing tension.

Demonstration video link: https://youtu.be/wejMfEBr7fw?si=fmyCRP2NyeLRDErk

Vertical Strengthen Exercises:

The vertical strengthens exercises comprise two distinct parts, each requiring that the fingers remain bound with a rubber band throughout. The first exercise focuses on the movements of the little finger while bound, the second part serves as a more intensive practice for the same finger. It is crucial for the player to concentrate on the little finger muscles, and avoid relying on other finger joints. Depending on individual physical strength, each set can be performed 6 to 12 times, with a rest period of 2 to 3 minutes in between.

The first vertical strengthen exercise: binding the left hand and little finger together under a stable condition, the rubber band should be placed at the root of the nail. Find a pen or an object of similar width; position one side of it toward the player while directing the other side in the opposite direction. Rest all the fingers above this object, the thumb must find its balance with other fingers, like a playing position. Gradually lift the little finger, engaging its muscles to execute the movement.

The second vertical strengthen exercise: maintaining the identical left-hand posture as in the first exercise, the player now lifts the little finger slowly, allowing the fingertip to drop below the object line. This positioning enables the player to see the nail beneath the object before gradually raising the finger back to the object.

Demonstration video link: https://youtu.be/j7tq9bF7pJE?si=mIL510-6-PkOiyTd

Attention: When a player engages in these exercises, they may experience soreness, tiredness, or a burning sensation in the muscles of the little finger, indicating that the muscles are at work. It is essential to take a few minutes for a break or to massage the area, allowing the finger to return to its normal condition. However, if the player encounters pain or a prickling sensation, it is imperative to stop the activity immediately and make the necessary adjustments to posture.

The Fourth Finger Stretching Exercises

This stretching exercise combines a natural posture of the left hand with an extended little finger, focusing on the movement of the finger and enhancing its flexibility. To perform this exercise, the player should utilize a metronome.

The first stretching exercise: utilizing a string, the notes B, C, and D will resonate as all-natural tones, set to a quarter note at a tempo of 60，the first downbeat begin with B

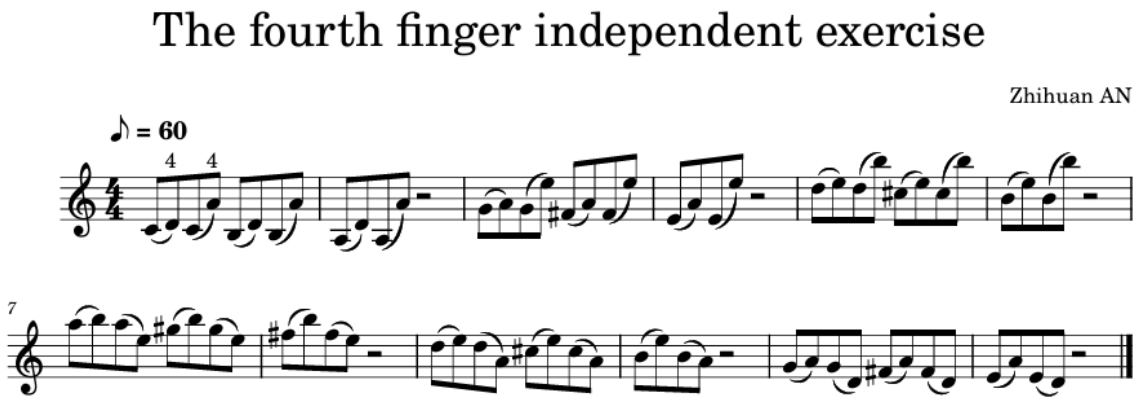
natural, in the second downbeat stretching the little finger out**,** maintaining its elevated position without dropping it. The remaining notes should be executed in the same manner.

The second stretching exercise: using the same string, notes, and tempo as in the first exercise, we will now divide the first downbeat into two motions of eighth notes. The first eighth note will sound the note B, while the second eighth note involves extending the little finger. Following this, the second quarter downbeat drop the little finger to the note E, the remaining notes will be executed in the same manner.

Demonstration video link: https://youtu.be/CxCNRblsqVw?si=kb017CYpIdyof2ZR

The Fourth Finger Independent Exercise

Recognizing that the fourth finger is the least robust of all, this exercise is designed to enhance its independent striking ability by switching between neighbor strings. All open string notes must be played utilizing the fourth finger. During the half rest, the player must relax the hand while preparing the third finger in advance. Once comfort with the tempo indicated in the score is achieved, it is always possible to adjust the pace to a quicker setting.



Demonstration video link: https://youtu.be/t5nsGGcJuzY?si=LRCq3osw1SHCvPQ2

The Fourth Finger Anticipation Exercises

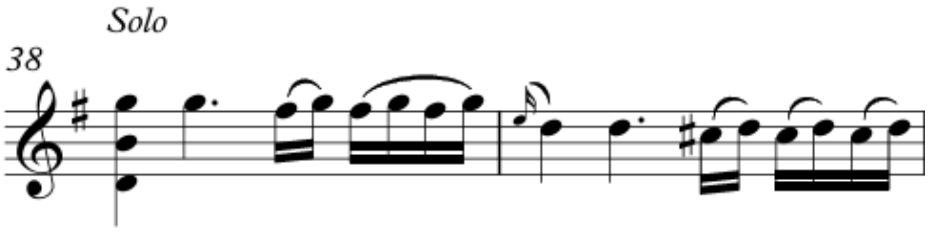
One approach to train a clumsy finger to function more efficiently is to always be prepared before the finger descends to the string. Without this anticipation, the fourth finger tends to lag, especially for violinists with smaller left hands, requiring additional time to span the dropping distance. However, the anticipated movement of the fourth finger does not seem to naturally comply with mental control, requiring immense patience, time, and attention to train it purposefully. Fortunately, all of the fourth finger exercises mentioned above are relevant fragments of this anticipated motion. I encourage you to closely observe the movement of the fourth finger and to consciously exert control over it while practicing these exercises.

The anticipated motion of the fourth finger frequently occurs in the descending sequence of a finger pattern. For example, the G major descending scale, after the fourth, third, and second fingers have lifted from the string, now the first finger remains, at this

moment, the fourth finger adopts an extended position. This motion is characterized by a synchronized action, allowing the fourth finger to effectively address any delays or flabby issues. This technique can be employed in all instances of fourth finger drops.

Demonstration video link: https://youtu.be/MPbKJDrr0Cc?si=okGcymTg6CLlR0ar

Example 2: Mozart Violin Concerto No.3 in G Major, K.216, First movement

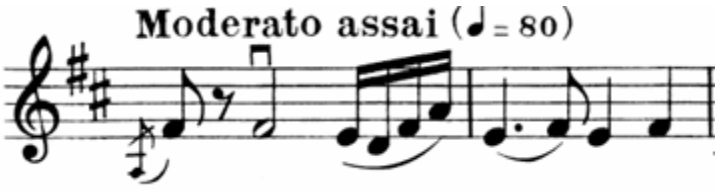


At the end of measure 38, anticipating the fourth finger above the note E natural, when playing the last note G natural.

Demonstration video link:

https://youtu.be/_wKbHbf7yyA?si=V7LOd3i1306EErgn

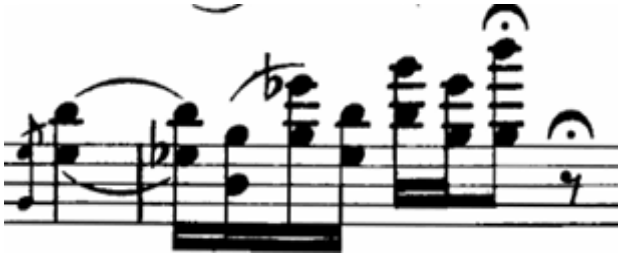
Example 3: Tchaikovsky Violin Concerto, Op.35 in D Major, First movement



At the end of the first measure, anticipating the fourth finger above the note A when the third finger dropping on the last note F-sharp.

Demonstration video link: https://youtu.be/8FGrPTwwHfo?si=aodc32gi4H5Nc9qe

Example 4: Kreisler: recitativo and scherzo-caprice op.6, mm. 17-18

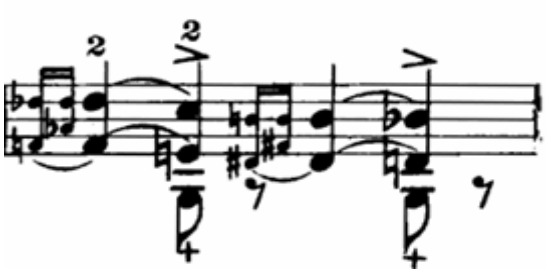


Anticipating the third and fourth fingers after playing the third double stop E-flat and B-flat. Anticipating the fourth finger above the final high note B-flat when playing the last double stop G and E-flat, this preparation allows the fourth finger to strike the final high note B-flat firmly.

Demonstration video link:

https://youtu.be/MosltObbwvU?si=_Ums-MWjxtEgq6X1

Example 5: Kreisler: Recitativo and Scherzo-Caprice op.6, m. 19



Anticipating the fourth finger above the G string when playing the second double stop F-natural and D-flat, ensuring that the pizzicato note G note emerges in perfect synchrony with the upper two notes. Anticipate the next pizzicato note in the same manner as the previous execution.

Demonstration video link:

https://youtu.be/e9KFnTV3FAY?si=xYC1Ox_BBLzRwjoI

Conclusion

My intention in writing this paper is to provide guidance for violinists who struggle with challenges posed by their small left hand. The ideas and exercises presented here are drawn from my daily practice and experiences in teaching students. The interplay between the body and hand operates in an intricate manner. After reading this paper, violinists may still have questions or encounter conflicts with what they have been taught

by their instructors. I strongly recommend always consulting with your teacher, as they are the ones responsible to understand your issues and closely observe your playing.

My hope for all readers is to recognize that playing the violin is a lengthy journey. If you find yourself unable to resolve certain issues today, it does not imply that you cannot overcome them tomorrow or in the future. I understand that some challenges can be very dejecting, and you might even think of giving up playing the violin. I encountered that too, but there is a fact that possibly no one else may ever grasp: How you overcome such challenges and create the path of your recovery. That experience is uniquely yours, and the insights you gain will prove invaluable. Therefore, my advice is to always keep a mindset of learning from failure, embracing immense patience and never giving up.

REFERENCES

Auer, Leopold. *Violin Playing as I Teach it*. New York: Frederick A. Stokes Company, 1921

Costantakos, Chris A. *Demetrios Constantine Dounis: His Method in Teaching the Violin*. New York: Peter Lang Publishing, Inc., 1997

Dounis, D.C, *Fundamental Technical Studies for the Young Violinist, Op. 23*. Philadelphia: Theodore Presser, 1935

Dounis, D.C, *The Dounis Violin Player's Daily Dozen, Op. 20.* New York: Harms, Inc., 1925

Fischer, Simon. "Fingertips." *Welcome to Basics!*, August 2000. https://www.simonfischeronline.com/basics-series.html

Fischer, Simon. "Finger pressure." *Welcome to Basics!*, December 1995. https://www.simonfischeronline.com/basics-series.html

Fischer, Simon. "Freeing the left hand." *Welcome to Basics!*, December 2008. https://www.simonfischeronline.com/basics-series.html

Fischer, Simon. "Holding the violin." *Welcome to Basics!*, February 2008. https://www.simonfischeronline.com/basics-series.html

Fischer, Simon. "Holding the violin and viola." *Welcome to Basics!*, June 1994. https://www.simonfischeronline.com/basics-series.html

Fischer, Simon. "Releasing the left hand (2)." *Welcome to Basics!*, November 1998. https://www.simonfischeronline.com/basics-series.html

Fischer, Simon. “The left thumb.” *Welcome to Basics!*, April 1995. https://www.simonfischeronline.com/basics-series.html

Flesch, Carl. *The Art of Violin Playing.* translated by Frederick Herman Martens. New York: C. Fischer, Incorporated, 1924

Galamian, Ivan. *Principles of Violin Playing and Teaching*. Englewood Cliffs, NJ: Prentice-Hall, 1962

Leland, Valborg. *The Dounis Principles of Violin Playing: Their Meaning and Practical Application*. London, The Strad, 1949

LLC, Medical Marketing Group. “Hand Anatomy.” *South Mountain Physical Therapy*, 2003. https://www.southmountainpt.com/Injuries-Conditions/Hand/Hand-Anatomy/a~280/article.html.

Michael, Valenzuela. “Anatomy, Shoulder and Upper Limb, Hand Interossei Muscles.” *StatPearls [Internet]*., July 24, 2023. https://www.ncbi.nlm.nih.gov/books/NBK534772/.

Quality and Efficiency in Health Care, Institute. “In Brief: How Do Hands Work?.” *InformedHealth.org [Internet]*., January 23, 2025. https://www.ncbi.nlm.nih.gov/books/NBK279362/#i2223.gi-sources.7.

APPENDIX A

VIOLIN POSITION AND FINGER PLACEMENT

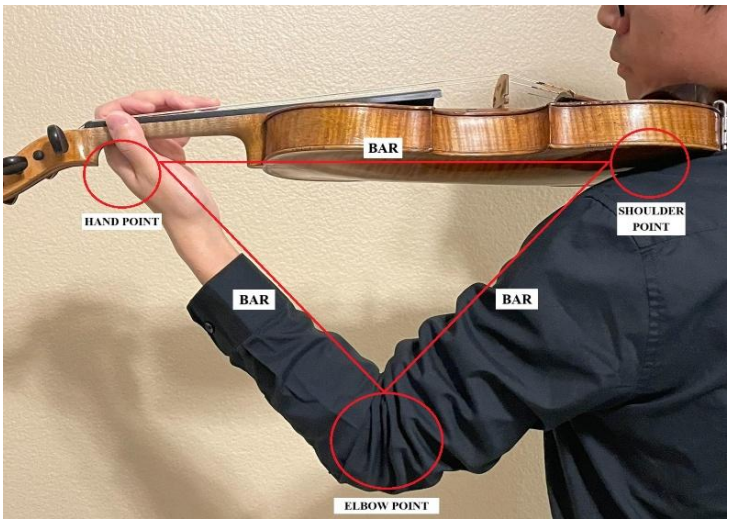


Figure 10

The Left hand and shoulder remain at the same level, with elbow supported beneath the violin, forming a large inverted triangle.

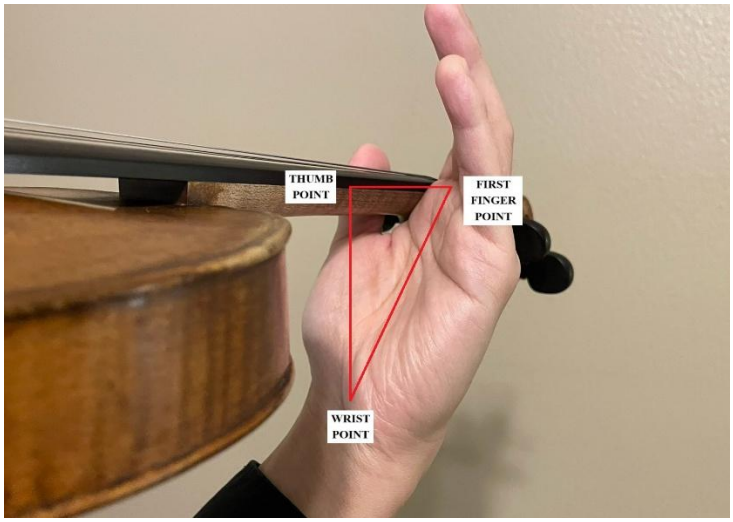
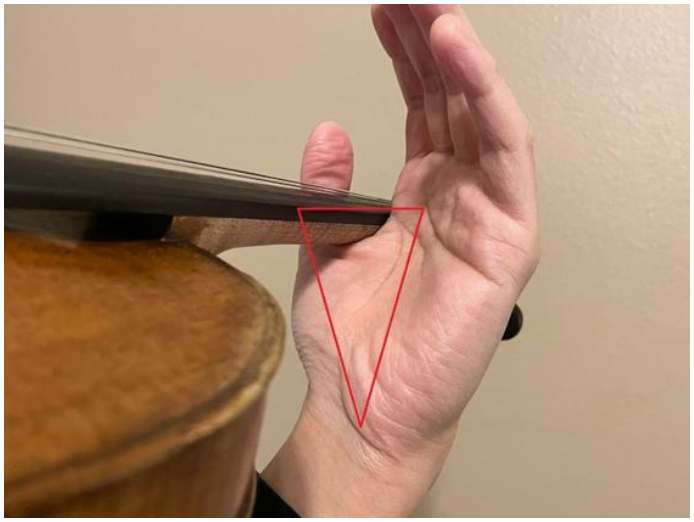


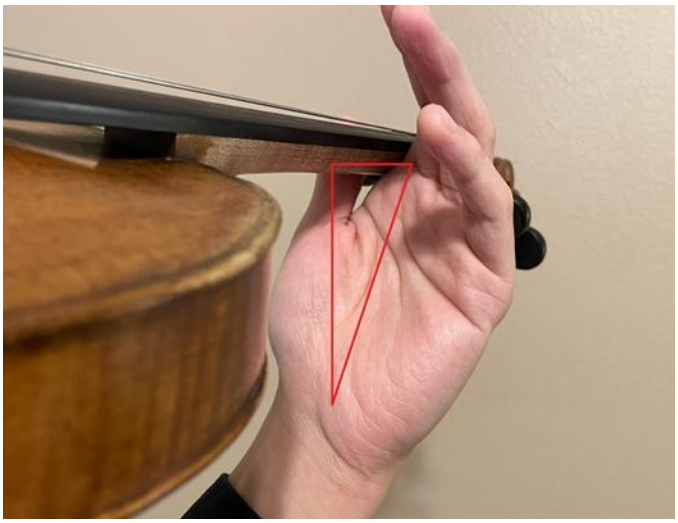
Figure 11

The thumb and index finger points remain at the same level, with carpal bone supported, forming a triangle.



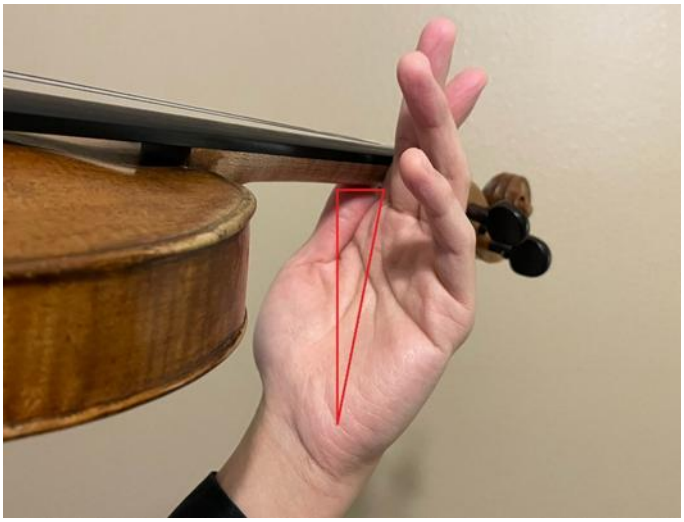
When the neck of the violin rests upon the first dorsal interosseous muscle, the thumb is over the neck, forming a wide triangle.

Figure 12



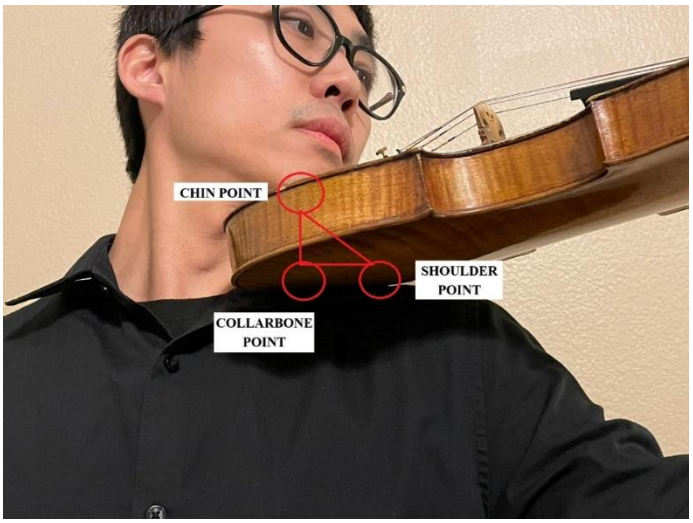
When the thumb is in a lower position, the thumb and index finger points get closer.

Figure 13



When thumb touches the base knuckle of the index finger, forming the narrowest triangle

Figure 14

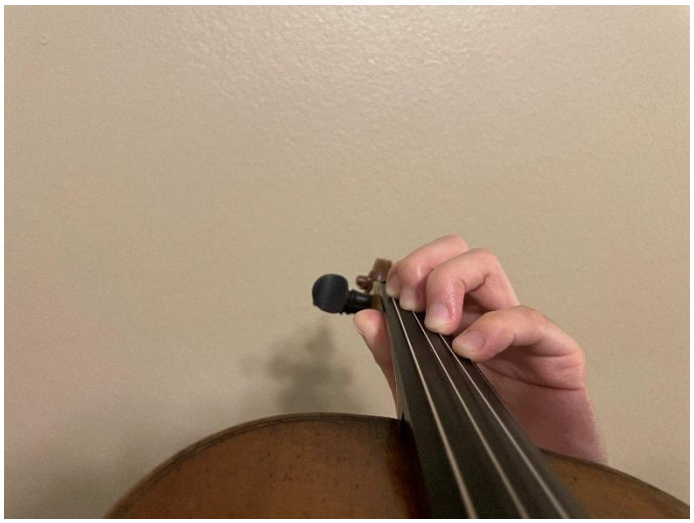


The chin point aligns with collarbone point, shoulder point and collarbone point forming a horizontal line

Figure 15

When the third and fourth finger overlaps, the contact point of the fingertips are different

Figure 16



When multiple fingers rest upon the strings, each contact points of the fingertips at different locations

Figure 17

APPENDIX B

DEMONSTRATION VIDEO LINK

https://youtu.be/UDfNAdVhMFI?si=3KaL_MbpDEBTJXO6

Examination for Leopold Auer treatise

https://youtu.be/1iq7SflMcDc?si=kAp-lK0Wy5-ZG68K

Examination for Carl Flesch treatise

https://youtu.be/QuJG-Ryc7og?si=KPEl5pH9sgzbC_Nw

Examination for Demetrius Constantine Dounis treatise

https://youtu.be/_Y_mmw_EWZU?si=tloUX5_GGO2Y-MbL

Examination for Ivan Galamian treatise

https://youtu.be/lOfksas79bs?si=eaoXINwNlN_pE4Qi

Examination for Simon Fischer treatise

https://youtu.be/QxCRQPFBsbM?si=2s070g0mNDW_Cjjc

This video presents a demonstration of Exercises for Hand Muscles

https://youtu.be/V1HrVPkW-ZE?si=Rxzn2BAoSW_PeIry

This video presents a demonstration of Exercises for Vertical Finger Movement (without violin)

https://youtu.be/RZcYnMNqJnQ?si=MCeLAcsd4_19Yl3q

This video presents a demonstration of Exercises for Vertical Finger Movement (with violin)

https://youtu.be/U3aPGduxI5w?si=XoMIWb_cdqHbYdNj

This video presents a demonstration of Exercises for Horizontal Finger Movement (with violin)

https://youtu.be/G46QGD-BPqU?si=EiffWkcLqzkPB3ix

This video presents a demonstration of Finger Pressure Exercises

https://youtu.be/s8H2DenRNt4?si=YzNfwKHEEsadHaa_

This video presents a demonstration of Progressive Fingered Exercise

https://youtu.be/vvarpYtR-6I?si=3BOKaH3AFfsJdom1

This video presents a demonstration of Positioning the Fourth Finger

https://youtu.be/wejMfEBr7fw?si=fmyCRP2NyeLRDErk

This video presents a demonstration of Sideway Extension Exercises

https://youtu.be/j7tq9bF7pJE?si=mIL510-6-PkOiyTd

This video presents a demonstration of Vertical Strengthen Exercises

https://youtu.be/CxCNRblsqVw?si=kb017CYpIdyof2ZR

This video presents a demonstration of The Fourth Finger Stretching Exercises

https://youtu.be/t5nsGGcJuzY?si=LRCq3osw1SHCvPQ2

This video presents a demonstration of The Fourth Finger Independent Exercise

https://youtu.be/MPbKJDrr0Cc?si=okGcymTg6CLlR0ar

This video presents a demonstration of The Fourth Finger Anticipation Exercises

https://youtu.be/_wKbHbf7yyA?si=V7LOd3i1306EErgn

This video presents a demonstration of Example 2: Mozart Violin Concerto No.3 in G Major, K.216, First movement

https://youtu.be/8FGrPTwwHfo?si=aodc32gi4H5Nc9qe

This video presents a demonstration of Example 3: Tchaikovsky Violin Concerto, Op.35 in D Major, First movement

https://youtu.be/MosltObbwvU?si=_Ums-MWjxtEgq6X1

This video presents a demonstration of Example 4: Kreisler: recitativo and scherzo-caprice op.6, mm. 17-18

https://youtu.be/e9KFnTV3FAY?si=xYC1Ox_BBLzRwjoI

This video presents a demonstration of Example 5: Kreisler: Recitativo and Scherzo-Caprice op.6, m. 19