

TEACHING VIBRATO: AN ECLECTIC APPROACH



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Early Writings on Vibrato

Leopold Mozart: *A Treatise On The Fundamental Principles Of Violin Playing* (1756)

For if we strike a slack or a bell sharply, we hear after the stroke a certain wave like undulation of the struck note. And this trembling after-sound is called tremolo....Take a pains to imitate this natural quivering on the violin, when the finger is pressed down on the string, and one makes a small movement with the whole hand; which however must not move sideways but forwards toward the bridge and backward towards the scroll.

Louis Spohr: *A Violin School* (1831)

....(width of tremolo) should only be slight, in order that the deviation from purity of tone (intonation) may scarcely be observed by the ear.

James Winram: *Violin Playing and Violin Adjustment* (1908)

There should be no close shake (vibrato) in exercises or scales, other than melodic exercises, and it should be judiciously used at all times, as it is possible to have too much of a good thing.

An Overview of Selected Violin Pedagogy Approaches to Teaching Vibrato

Paul Rolland (1911-1978):

"It is the movement of the fingertip that is the ultimate cause of vibrated sounds."

"The Teaching of Action in String Playing" p. 153

Rolland's Approach to Vibrato:

Clearly defined measurable qualities of artistic vibrato:

- The speed and width of the vibrato movements are *regular* (i.e. reasonably even).
- The average speed of the vibrato is about 6 and ½ cycles per second.
- The average width (amplitude) of the vibrato is a quarter-tone.

The uniqueness of Rolland's approach to teaching vibrato:

- Violin/viola hold: "scroll up position"
- In early stages of learning vibrato teacher manipulates student's fingers, wrist, arm....
- Vibrato exercises with and without instrument & in different violin/viola hold positions (e.g., guitar position, shot gun position, playing position)
- When to start? -- As soon as student starts practicing shifting exercises

Rolland's Pre-Exercises & Exercises for Teaching Vibrato:

- "Relaxation Exercises":
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- "Tapping Exercises":
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- "Shuttle Exercise":
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- "Tap and Hold Exercise":
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- "Pulsating the Fingers Exercise":
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- "Rivarde Exercise":
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- "Polishing the Strings Exercise":
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- "Exercises for Developing Flexibility of the Wrist and Fingers":
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Samuel Applebaum (1904-1986):

“The flexibility of the first joint (nearest the fingertip) is essential for development of a good vibrato.”

“The Art and Science of String Performance” p. 64

Applebaum’s Approach to Vibrato:

Clearly explained sympathetic motions that accompany different types of vibrato:

- Hand vibrato causes sympathetic motion in forearm.
- Arm vibrato causes sympathetic motion in the upper arm.
- Finger vibrato causes sympathetic motion in the hand.

The uniqueness of Applebaum’s approach to teaching vibrato:

- Specific order of fingers: 2nd finger, 3rd finger, 4th finger, 1st finger (first to be taught in III position)
- Exercise for development of flexibility of left hand fingers joints
- Exercises for too fast, too slow, and inconsistent vibrato
- When to start?-- As soon as student experiences/masters shifting between 1st and 3rd position

Applebaum’s Pre-Exercises & Exercises for Teaching Vibrato:

- “Preparatory Exercises”:

- “Exercise for Development of Finger Joints Flexibility ”:

- “Finger Oscillations”:

- “Exercise to Speed Up Vibrato”:

- “Exercise to Slow Down Vibrato”:

- “Finger-Legato Exercise”:

George Bornoff (1907-1998):

“The impulse of the vibrato, however, must be perceived as coming from the finger: the finger pulls the hand (and wrist) after it, rather than the wrist pushing the finger.”

“Bornoff: Breakthrough for String Education” by Howell & Howell p. 125

Bornoff’s Approach to Vibrato:

Clearly explained the relationship between finger and wrist vibrato movement:

- Vibrato originates from the tip of the finger.
- The finger pulls the wrist, rather than wrist pushes the finger.

The uniqueness of Bornoff’s approach to teaching vibrato:

- Emphasized that the finger needs to *pass* the vertical position to develop flexibility in the knuckles of the left hand in order to develop sufficient flexibility of first knuckle
- Explained an important rule regarding the relationship between the length of the string and the speed of the vibrato that applies to all four bowed-string instruments: As the length of the string *decreases* the speed of the vibrato *increases*.
- Offered the most systematic approach to practicing measured oscillations

Bornoff’s Pre-Exercises & Exercises for Teaching Vibrato:

- “Preliminary Exercises”:

- “Controlled Oscillations ”:

- “Continuous Oscillations”:

Ivan Galamian (1903-1981):

“The combining of all types of the vibrato with all of the dynamic nuances and shadings of which the bow is capable can result in an endless succession of possibilities for giving life, color, and variety to a violinist’s performance.”

“Principles of Violin Playing & Teaching” p. 38

Galamian’s Approach to Vibrato:

Clearly explained the order of movements:

In hand vibrato impulse comes from hand and finger lets itself be moved by the action of the hand. (Many beginners have difficulty with hand vibrato because finger leads it.)

- In arm vibrato impulse comes from forearm and hand lets itself be moved by the action of the forearm
- In finger vibrato impulse, however, comes from finger itself. Last type of vibrato to be taught

The uniqueness of Galamian's approach to teaching vibrato:

- When practicing or using hand vibrato, the first motion needs to be backward (towards the scroll).
- At first, vibrato needs to be taught in III position.
- Elaborated on the relationship between vibrato and the dynamics of the bow: intense and wider vibrato is more appropriate for *forte* dynamics (arm vibrato) and narrower and slower vibrato is more appropriate for *piano* dynamics (finger and wrist vibrato).
- Additionally, vibrato needs to reflect musical style (e.g., vibrato in Mozart oppose to vibrato in Brahms) and he explained that the shape of player's finger has important influence on type of vibrato.

Galamian's Exercises for Teaching Vibrato:

- Resting violin/viola scroll on music stand or wall:

- Intermediate step: teacher inserts two-three fingers between student's hand and instrument:

- Use of dotted rhythms:

- Exercises for loosening the finger joints:
 - Finger on string and alternate stretching and bending the joint closest to nail (no bow): _____
 - Substitution of lower numbered finger with higher numbered finger:

 - Playing chromatic scales with sliding fingers:

Dorothy DeLay (1917-2002):

“DeLay, to date has the notion, that one of the keys to gauging the communication of the human emotions in violin playing, is to be able to tap into the relationship between energy and relaxation. The factors of vibrato are such that the control of vibrato itself, can effect the amount and quality of energy that is conveyed at a particular point in a piece of music.”

“An Investigation Into the Realm of Violin Techniques: Conversations with Dorothy Delay” by Nancy Hsu-Hsein Tsung, pp. 43-44

DeLay’s Approach to Vibrato:

Clearly explained the notion and concept of “Vibrato Ping”:

- “Ping” is the term that describes the phenomenon of energy and relaxation in vibrato.
- If the pitch is played for a while at a constant speed of vibrato and if speed is reduced at the last second before returning to the pitch, very quick return to the pitch is what creates energy or “ping”.
- In order to gain this control, DeLay suggests vibrato control exercises to be practiced in duple-groupings, and never in triplet groups

The uniqueness of DeLay’s approach to teaching vibrato:

- Order of fingers: 2nd, 3rd, 1st, and 4th and start vibrato exercises on second string (e.g., on A string for violins)
- Includes harmonics in practicing controlled vibrato oscillations and progresses to practicing the same exercises without harmonics (i.e., solid finger on string)
- Advance from simple duple-groupings into dotted- and double-dotted rhythms only after student graduated from harmonic to solid finger stage of controlled oscillations.

DeLay’s Exercises for Teaching Vibrato:

- Arm vibrato:

- Wrist vibrato:

- Finger vibrato:
 - Start with 2nd finger in IV position on second string (e.g., on violin that would be F natural):

 - Finger in ‘play’ position -‘flat down or relax position’ (e.g., on violin that would be E)-back to ‘play’ position
 - Practice with steady, duple-groupings on MM=54 then MM=88.
 - The forward ping always comes on-the-beat. Include harmonics to remediate too narrow vibrato and move exercise to other strings.
 - Be attentive to the intonation of main pitch as it tends to go higher and higher as exercise progresses.

Other string pedagogy approaches on teaching vibrato.....

Shinichi Suzuki:

- Proposed “**Two Tone Vibrato**”
- Proposed that while fingertip movement is propelled by the wrist and forearm, the fingertip pad **first roles forward than backward**.
- Suggested teaching vibrato **after several years of instruction** (in Book 4 – around Vivaldi a-minor Concerto)

Kato Havas:

- Advocated “natural vibrato” versus “forced vibrato”
- Explained that when fingers are very lightly placed on the string “**small column (or cushion) of air**” **remains in between the string and finger**. When the bow is drawn across the string this column of air vibrates.

Samuel Fisher:

- Proposed only two types of vibrato: (a) arm vibrato and (b) hand vibrato. Finger vibrato is a part of arm or hand vibrato.
- Proposed that first step in development of vibrato is **to not to concentrate on vibrato** itself but to concentrate on **balance and lightness** of the hand.
- Explained that *continuous vibrato* has **two aspects to it**:
- Every note in the phrase needs to be vibrated (unless too fast): some notes are vibrated more some less, some faster, some slower, some wider, some narrower
- Vibrato should not start late at the beginning of the note and should not stop before the end of the note: should continue between notes
- Known for suggestion to practice vibrato **from every angle**: arm vibrato, hand vibrato, the rotation of the forearm, individual movements of the three parts of finger, the different parts of the fingertip, every possible combination of width and speed, dynamics, etc.

Carl Flesh:

- Proposed that vibrato’s character, liveliness and duration **depicts a player’s personality**.
- Defined “**totally satisfying vibrato**” as the **combination of finger, hand and forearm movements**.
- Observed that the great violinists **use vibrato all the time** but their vibrato **varies in speed and width** allowing for expression of feeling ranging from the softest, almost inaudible to the more passionate and intense.

Steps for Teaching Vibrato: An Eclectic Approach

“We begin with the hypothesis that any subject can be taught in some intellectually honest form to any child at any stage of development.”

Jerome Bruner, 1960

Pre-Requisites:

- Proper body posture (standing and sitting): Rolland, Suzuki, & Havas steps

- Proper instrument hold: Rolland, Suzuki, & Havas steps

- Proper left hand shape:
 - Left-hand frame (Rolland, Geminiani, Leopold Mozart steps, modified Suzuki repertoire steps & double stops in more advanced stages of development)

 - Opening the space between 1st and 2nd finger (Fisher steps & modified Suzuki repertoire steps)

- Relaxed left arm: Rolland steps (e.g., swinging, dropping, “Ski Jumps,” & “Shuttles”)

- Flexible left hand: Rolland steps (e.g., tapping exercises) & Fisher steps (e.g., moving wrist in every possible direction)

- Relaxed thumb: Rolland steps (e.g., thumb tapings & thumb slides)

- Rote shifting pre-exercises & exercises from lower to middle positions: Rolland steps (e.g., *Ghosts*, *Flutes*, *Matching Harmonics*, *Up the Scale with Au Claire de Lune*), modified Suzuki repertoire steps (e.g., *Harmonic Twinkles*), & Bornoff steps (e.g., one finger one-octave scales)

- Use of the whole bow: _____

Viva Vibrato! method-book, pp. 2-3 supply many exercises for vibrato readiness.

Learning Vibrato Motions in Tree Stages:

Beginning Stage: No Instrument-No Bow

Finger Vibrato:

- *Calisthenics Knuckles*: flatten and bend the first knuckle of each left hand finger in rhythmic way
 - Practice on thumb, right hand/arm, or on a small rubber ball while chanting *Fingers Flopping Never Stopping* or singing *Shoo Fly Don't Bother Me*
- *Jelly Knuckles*: with the help of right-hand pointer move first knuckle of each left-hand finger in up-down direction to get “flyby” first knuckle (as fast as possible)

Hand (Wrist) Vibrato:

- Relaxed wrist exercises with *Dinner Rhythms*: hold left-hand wrist with right-hand and move left-hand back and forth in rhythmic way
- Egg-shaker exercises with *Dinner Rhythms* (Easter egg-shells filled up with the beans produce the clearest sound): same as above just with egg-shaker

Arm Vibrato:

- *See-Saw* exercise: while holding left-arm elbow move whole arm away from and towards the body:
 - Gradually increase & decrease the speed of the motions
- *Coordination exercises*:
 - Open and close motions (e.g., place bow arm in pretended “frog position” & left arm in pretended high position on violin/viola)
 - Parallel motions (e.g., place bow arm in pretended “tip position” & left arm in pretended high position on violin/viola)
 - Left hand goes down and up the pretended finger board fast while bow is moving slowly
 - Right hand does tremolo on pretended instrument while left hand does glissando

Intermediate Stage: Yes Instrument-No Bow

Finger Vibrato:

- *Calisthenics Knuckles* on top of the instrument:
 - Suggested order of fingers: third, second, first and fourth finger
 - With chant, song, or *Dinner Rhythms*
- *Stretching & Bending fingers* exercise on the string:
 - Place finger on second string in III position and alternate stretching and bending the finger while doing *Dinner Rhythms*

Hand (Wrist) Vibrato:

- Tapping exercises
 - With the hand in the middle position and thumb under the neck, tap with the curved third finger on the top of the upper board to the left of the lowest string rhythms the choice while imagining ping-pong ball bouncing back.
 - Tap rhythms of choice on each string while imagining fingers touching the hot-stove
 - Attention on “lifting motion”
- “*Rivarde Exercise*”
 - Hand in middle position with lower part of the palm touching instrument’s shoulder
 - Third finger lightly touching the string (harmonic touch)
 - Slant the hand back towards the scroll, press the third finger and propel hand forward, then let it fall back immediately, then rest. This is a single vibrato cycle.
 - Practice with all of the fingers in patterns of two, three, four and five full cycles followed by rests.

Arm Vibrato:

- *Polishing string* exercise
 - With tissue paper placed in between the finger and the string “polish the strings” in the low, middle and high positions while keeping the base of the first finger close to the instrument’s neck
 - Practice in “rest” position
 - Practice in “shotgun” position.
 - Practice in “playing” position.
 - Also practice with no tissue paper
- *Sliding on “Magic X”* exercise (start with instrument in rest position)
 - Big motions
 - Smaller and smaller
 - Stop fingers while thumb is still moving
 - Opposite: Stop thumb while fingers are still moving (fingers off)
 - Thumb and fingers are anchored while continuing balanced swinging
 - Practice in “rest,” “shotgun” and “playing” positions

Advanced Stage: Yes Instrument-Yes Bow

Finger Vibrato:

- *Pulsating or bouncing fingers* as if altering harmonics and stopped tones on one-octave scales played with slow bows; it will sound like harmonics; try to keep bow hand unaffected by left hand
- *Wiggle Exercises:* must be with teacher’s help for a long time
 - Wiggles on some notes:
 - Scroll on teacher’s shoulder

- Student plays "Twinkle" theme in slow tempo while sliding on Magic X during open strings
- On every on-string finger the teacher places his/her right-hand fingers (three fingers) on student's finger and wiggles the student's finger.
 - Focused wiggles:
 - Teacher shakes student's finger with the his/her right-hand fingers (two fingers) while student plays one-octave scale in slow tempo and with long note values
 - Student's thumb away from instrument
 - Students' thumb on neck
 - Aim for good sound (fast, wiggly)
- Substitution of lower finger for higher
- Chromatic scales with sliding fingerings

Hand (Wrist) Vibrato:

- *Developing range of motion with harmonic touch* (Kievman)
- Bornoff *Controlled Oscillations* sequence with little weight in finger
- Bornoff *Continuous Oscillations*
- *Oscillations with dotted rhythms*

Arm Vibrato:

- *Finger & Open String* exercise
 - While sliding in between I & III position
 - Two quarter notes per bow – *legato*
 - 1st-open 1st open; 2nd open 2nd open; 3rd open 3rd open; 4th open 4th open; and back starting with 4th
 - Release elbow during open string
- *Open String & Finger* exercise (variation on the above exercise):
 - While sliding I between I & III position
 - One quarter note followed by half note - *legato*
 - Open 1st, open 2nd, etc. like above
 - Suggested bowings for this variation:
 - One note (half note) per bow
 - Quarter note up bow and half note down bow
 - Slurred quarter and half note
 - Both elbows swing

First pieces to apply learned vibrato motions:

- French Folk Song in III position (starting pitch for violins G (4th finger) on A string)
- In pieces: start with “assigned to vibrate notes”
- *Viva Vibrato!* method-book and DVD by Gerald Fischbach & Robert Frost provides full repertoire of pieces to be practiced in developing stage of vibrato.

Remediating vibrato:

- **Concern:** The student's vibrato is too wide and therefore not applicable for soft dynamics.
 - **Remedy** for controlling width of vibrato:
 - If the student has too wide vibrato, practice fast vertical motions with each finger in 3rd position; fingers go very fast down and up (like thrill vibrato) (**adapted from Samuel Fisher**)
- **Concern:** Student always plays with the same speed of the vibrato and therefore is not able to vibrate notes in faster passages.
 - **Remedy** for controlling speed of vibrato:
 - Practice scales in long note values with crescendo to decrescendo and all kinds of dynamic combinations (**adapted from Rebecca Henry & Paul Rolland**)
- **Concern:** Student vibrates only some notes or student starts the note without vibrato, adds some vibrato and stops vibrating again.
 - **Remedy** for developing continuous vibrato:
 - *Walking Fingers* (**adapted from Rebecca Henry**)
 - Scales in quarter notes (bowing pattern: first note separated, other notes slurred); vibrate in between notes; release finger before transferring to next
 - Bornoff's *Continuous Oscillations* exercises
- **Concern:** Student avoids vibrating even though she/he has technical facilities to do so.
 - **Remedy** for encouraging student to incorporate vibrato in their playing:
 - Assign a few *special notes* in the piece that the student must vibrate and then expand to other notes

Vibrato Prayer

(by Igor Ozim; with thanks to Dr. Fischbach)

Grant me that I vibrate:

- all 1st and 4th fingers,
- the first short note after a long note,
- the last note before a shift,
- the first note after a shift,
- when crossing a string,
- and in diminuendo,

AMEN.

References

- Fischbach, G. F., & Frost, R. S. *Viva Vibrato!*, San Diego, CA: Neil A. Kjos
- Fisher, S. (2013). *The violin lesson*. London, UK: Peters Edition Limited.
- Flesh, C. (2000). *The art of violin playing*. New York, NY: Carl Fisher
- Galamian, I. (1985). *Principles of violin playing and teaching*. Ann Arbor, MI: Shar Products Company.
- Howell, J. R., & Howell, F. C. (2003). *Bornoff: Breakthrough for string education* (2nd edition). Newton Highlands, MA: The Foundation for the Advancement of String Education.
- Isoda, H. (Producer) & Zweig, M. (Author). (2008). *String Pedagogy*. [DVD]. United States. RIAX: Digital Art for the Future.
- Perkins, M. M. (1995). *A comparison of violin playing techniques: Kato Havas, Paul Rolland, and Shinichi Suzuki*. Bloomington, IN: American String Teachers Association with National School Orchestra Association, Tichenor Publishing.
- Rolland, P. (2000). *The teaching of action in string playing: Developmental and remedial techniques* (2nd edition). Bloomington, IN: American String Teachers Association with National School Orchestra Association, Tichenor Publishing.
- Rolland, P. (Author). (2008). *The teaching of action in string playing*. [DVD]. United States. RSRA.
- Tsung, N. H-H. (1993). An investigation into realm of violin technique: Conversations with Dorothy DeLay. (Unpublished doctoral dissertation). The Julliard School of Music, New York.

