

Practice Techniques



RICHARD AARON



ABOUT THIS COURSE

Looking for new ways to keep your practice fresh? Join renowned pedagogue Richard Aaron as he shares exercises to make your practice sessions more effective and engaging.

CONTENTS

How to Warm Up the Left Hand – 03

Scale Patterns and Rhythms – 05

Practicing Dynamics – 12

Shifting Using Stretches – 13



If you have any corrections, comments, or critiques relating to this workbook, please send them to marek@tonebase.co. We strive to deliver the highest quality enrichment experience. Thank you!

How to Warm Up the Left Hand

When you're about to perform but you can't play while you're backstage, silent finger exercises can be an excellent way to warm up the left hand and improve dexterity.

A great exercise comes from Aldo Pais's *Cello Technique (for the Left Hand)*:

Con arco e senza arco

5. a)

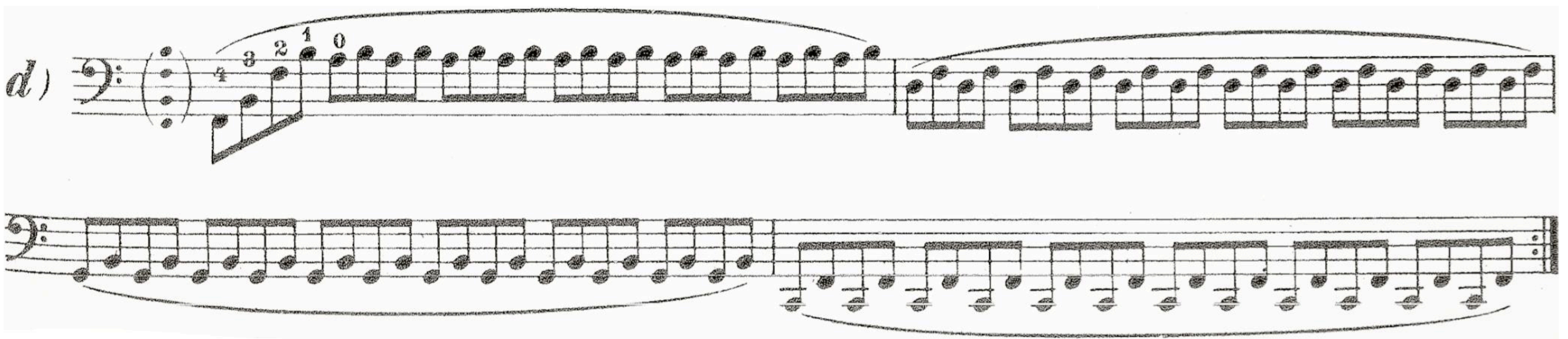
Exercise 5a consists of two staves. The top staff is in bass clef with a key signature of one sharp (F#). It begins with a double bar line and a fermata. The first measure contains a whole note with a finger number '4' above it. This is followed by a series of eighth notes, with fingerings '2', '3', and '0' indicated above the first three measures. The staff continues with a series of eighth notes, ending with a fermata. The bottom staff is also in bass clef and contains a series of eighth notes, starting with a finger number '0' above the first measure. The exercise is marked 'Con arco e senza arco'.

b)

Exercise 5b consists of two staves. The top staff is in bass clef with a key signature of one sharp (F#). It begins with a double bar line and a fermata. The first measure contains a whole note with a finger number '4' above it. This is followed by a series of eighth notes, with fingerings '2', '3', and '0' indicated above the first three measures. The staff continues with a series of eighth notes, ending with a fermata. The bottom staff is also in bass clef and contains a series of eighth notes, starting with a finger number '0' above the first measure. The exercise is marked 'segue'.

c)

Exercise 5c consists of two staves. The top staff is in bass clef with a key signature of one sharp (F#). It begins with a double bar line and a fermata. The first measure contains a whole note with a finger number '4' above it. This is followed by a series of eighth notes, with fingerings '2', '3', and '0' indicated above the first three measures. The staff continues with a series of eighth notes, ending with a fermata. The bottom staff is also in bass clef and contains a series of eighth notes, starting with a finger number '0' above the first measure. The exercise is marked 'segue'.



Place all your fingers lightly on different strings without pressing down, and gently tap each finger on the string. At first, it may not feel like much, but over time, you'll notice improvements in coordination. Keep your fingers relaxed throughout.

Another useful exercise is from W. Thomas-Mifune's *Daily Exercises for Cello*:

G e g e n t e i l : Finger aufheben

Wir üben danach eine Gegenbewegung: leicht akzentuiertes Anheben des betreffenden Fingers.



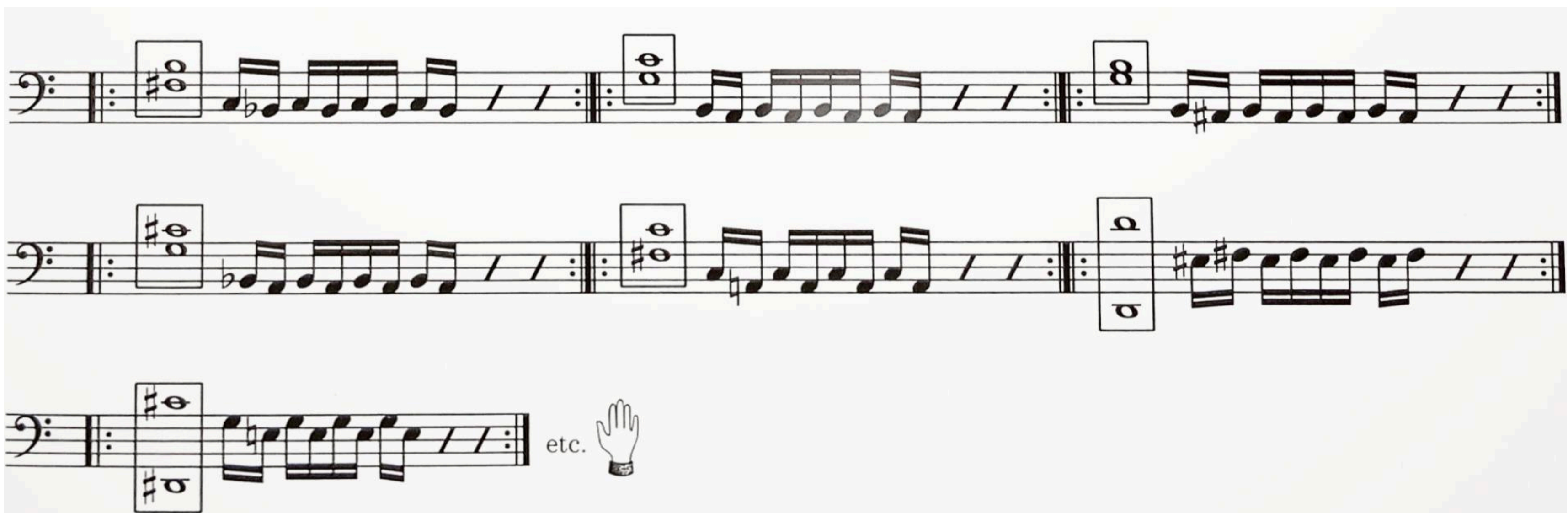
Die betreffenden Finger abwechselnd heben und fallen lassen (bzw. klopfen).

O p p o s i t e : Raising the finger

After this we practice the opposite movement: lifting the finger, light accentuation.

The fingers should be raised and lowered alternately (knocking).





Similar in concept, this exercise involves placing fingers 3 and 4 on one string while tapping fingers 2 and 1 on another.

You can also practice away from the cello by placing your fingers on a flat surface, like a table, and tapping through different finger combinations. Doing this for just five minutes a day helps with coordination and warms up your hand effectively.

Scale Patterns and Rhythms

Richard Aaron introduces four of his favorite bowing patterns and rhythms. With these tools, scale practice can become not only more productive but also more enjoyable! The first resource is from Margaret Pardee, an assistant to Ivan Galamian. Here's a breakdown of each section of the chart:

- **A:** Dividing the bow into 2, 3, 4, 6, 8, 12, or 24 notes per bow;
- **B:** Rhythm patterns;
- **C:** Detaché and martelé in various parts of the bow;
- **D:** Staccato;
- **E:** Slurred staccato;
- **F:** Staccato/martelé;
- **G:** Collé/spiccato
- **H:** Viotti bowings;
- **I:** Paganini bowing.

MARGARET PARDEE'S BOWING AND RHYTHM CHART

A 3 Octave Accelerating and Decelerating Series

$\frac{2}{4}$ 2 notes per bow, 1 note per beat

3 notes per bow, 1 1/2 notes per beat

4 notes per bow, 2 notes per beat

6 notes per bow, 3 notes per beat

8 notes per bow, 4 notes per beat

12 notes per bow, 6 notes per beat

$\frac{3}{4}$ 24 notes per bow, 8 notes per beat

C $\frac{3}{4}$ Detaché/Martelé/Detaché Series

Separate Bows
Balance Point to Upper Half
Start at the Frog

2's	-	$\frac{3}{4}$ Detaché	} Martelé
3's	-	Martelé	
4's	-	Martelé	
6's	-	Martelé	} Detaché
8's	-	Detaché	
12's	-	Detaché	
24's	-	Detaché	

B Rhythm Patterns 1 Rhythm Patterns 2

4, 6, 8, 12 notes per bow

1.a. 2.a.

b. b.

c. Rhythm Patterns 3

d.

3.a.	2	4	6
b.	2	6	4
c.	4	2	6
d.	4	6	2
e.	6	2	4
f.	6	4	2

Rhythm Patterns 4

h. 4.a. 1 3 8

i. b. 1 8 3

j. c. 3 1 8

k. d. 3 8 1

l. e. 8 1 3

f. 8 3 1

D Alternating

(Zig-Zag)

E Slurred Staccato

F Martelé/Staccato

G Collé/Spiccato Series

2's - Collé use "no bow"

3's - 1 Collé, 2 Spiccato

4's - Spiccato

6's - Spiccato

8's - Spiccato (Sautillé)

12's - Sautillé

24's - Sautillé

H Viotti Bowing 1

Viotti Bowing 2

and

Frog/BP Upper Half

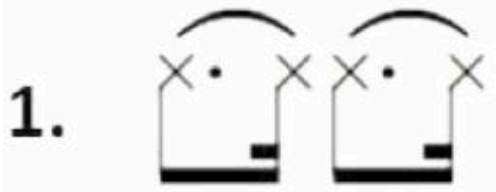
I Paganini bowing


This highlighted exercise from the **B section** can be interpreted in three ways:

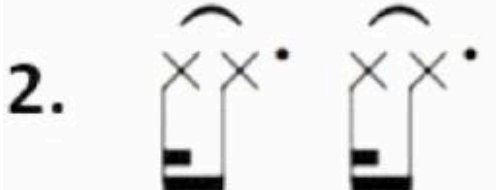
1. Play in one bow, interpreting the numbers as rhythmic values (e.g., 2 for eighth notes, 4 for sixteenth notes, 6 for sextuplets).
2. Play the notes rhythmically even, but change the bow direction according to the numbers (e.g., 2 notes in a down-bow, 4 notes in an up-bow, 6 notes in a down-bow).
3. Interpret the numbers as rhythm while playing all notes separately in the bow.


The second resource is from Theodore Buchholz and Robert Jesselson’s *The Cellist’s Guide to Scales and Arpeggios*:

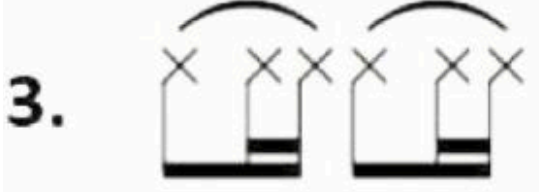
C. Spiccato

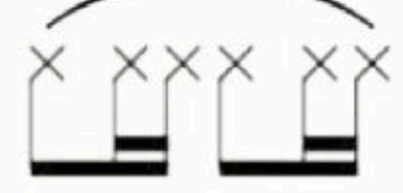
1. 

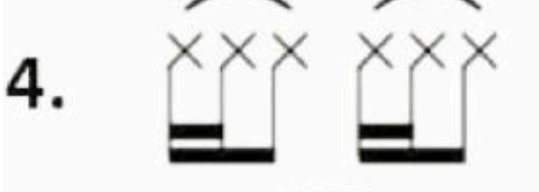


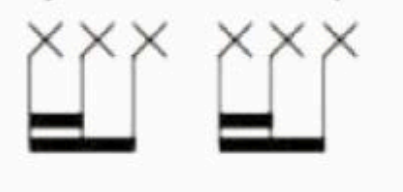
2. 

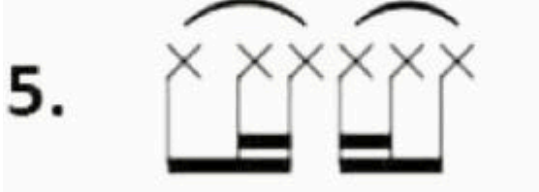


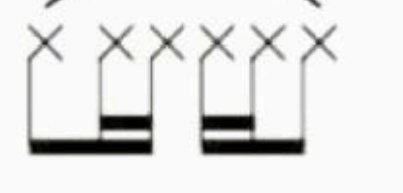
3. 

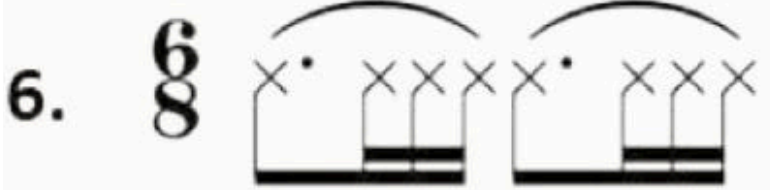


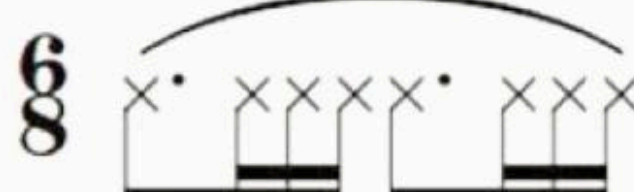
4. 

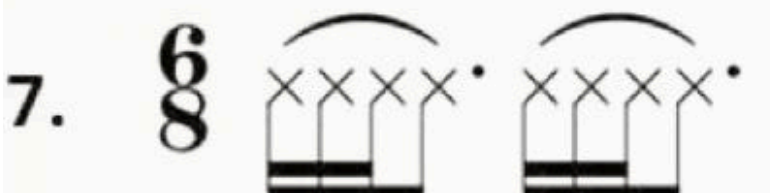


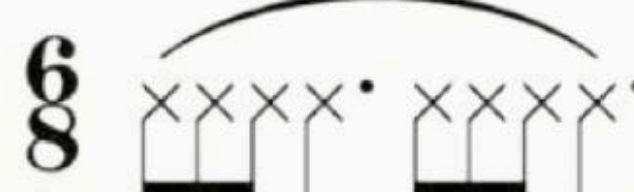
5. 

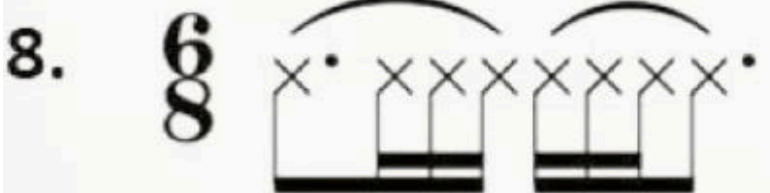


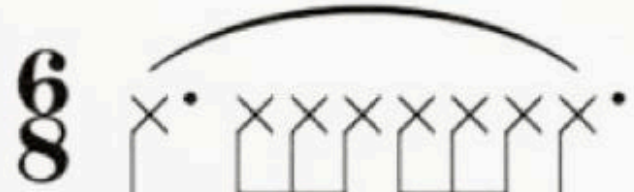
6. 



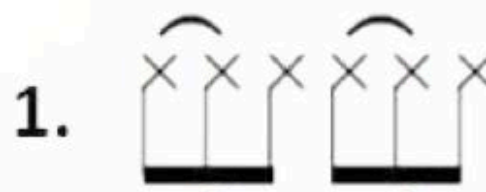
7. 

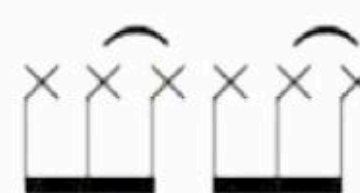



8. 




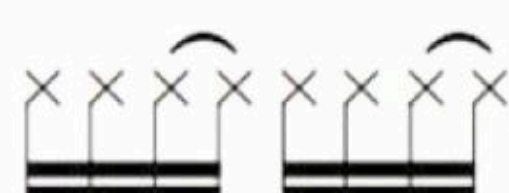
B. Slurs and Spiccato

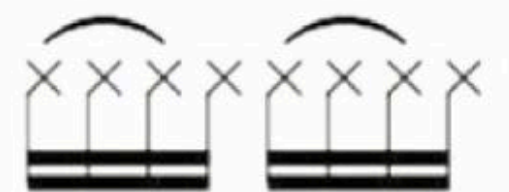
1. 

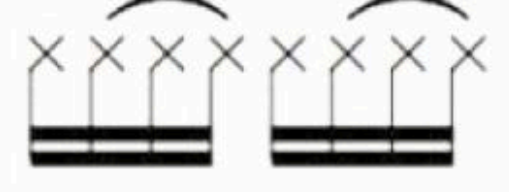


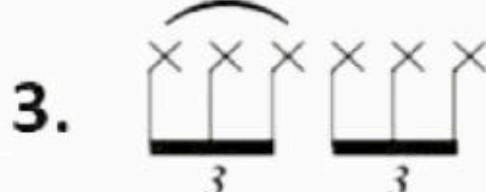
2. 

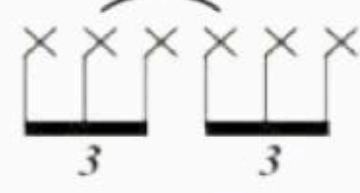


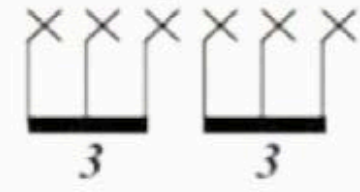


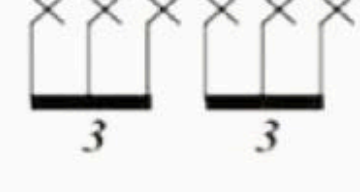


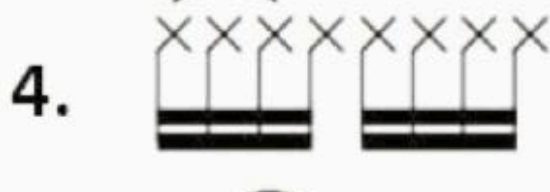


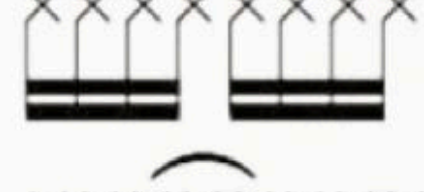
3. 

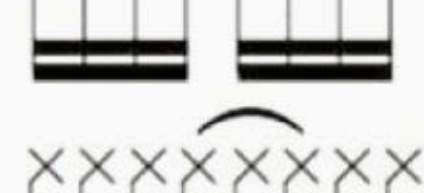


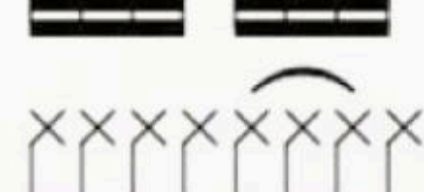


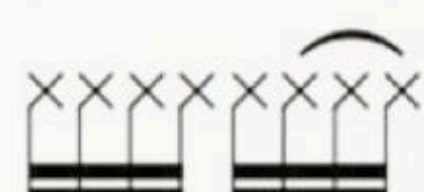


4. 









07

The third comes from Ivan Galamian's Scale System:

Section 2: Rhythms (slur 12 notes)

(a) (b) (c)

(d) (e) (f)

(a) (b) (a) (b)

(a) (b) (a) (b)

(a) (b) (a) (b)

(a) (b)

(a) (b)

The following groupings are to be practiced in both (a) and (b) forms as given in the example immediately preceding.

2 + 6 + 4	2 + 6 + 4
4 + 2 + 6	4 + 2 + 6
4 + 6 + 2	4 + 6 + 2
6 + 2 + 4	6 + 2 + 4
6 + 4 + 2	6 + 4 + 2
1 + 3 + 8	1 + 3 + 8
1 + 8 + 3	1 + 8 + 3
3 + 1 + 8	3 + 1 + 8
3 + 8 + 1	3 + 8 + 1
8 + 1 + 3	8 + 1 + 3
8 + 3 + 1	8 + 3 + 1

Section 3: Slurred Staccatos



Section 4: Bowing patterns



The Viotti Bowing



The Paganini Bowing



Section 5: Accents



Accenting 1, 2, 3, 4 in sequence



Accenting 2, 3, 4, 1



Accenting 3, 4, 1, 2



Accenting 4, 1, 2, 3



Finally, the fourth is Andrei Pricope's compilation of bowings and rhythms from O. Ševčík:

This musical score contains 41 numbered exercises for the left hand, written in bass clef, 4/4 time, and the key of D major (indicated by two sharps). The exercises are organized into 10 staves. Exercises 1 through 29 are in 4/4 time, while exercises 30 through 41 are in 2/4 time. The exercises focus on various bowing techniques, including slurs, accents, and specific bowing patterns. Exercise 1 is marked 'also' with a bowing symbol. Exercises 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, and 41 all feature bowing symbols (V) above the notes. Exercises 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, and 41 also feature slurs. Exercises 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, and 41 all feature slurs. Exercises 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, and 41 all feature slurs. Exercises 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, and 41 all feature slurs.

42 43 44 45 46 47

48 49 50 51 52

53 54 55 56 57 58

59 60 61 62 63 64

65 66 67 68 69

70 71 72 73 74

75 76 77 78

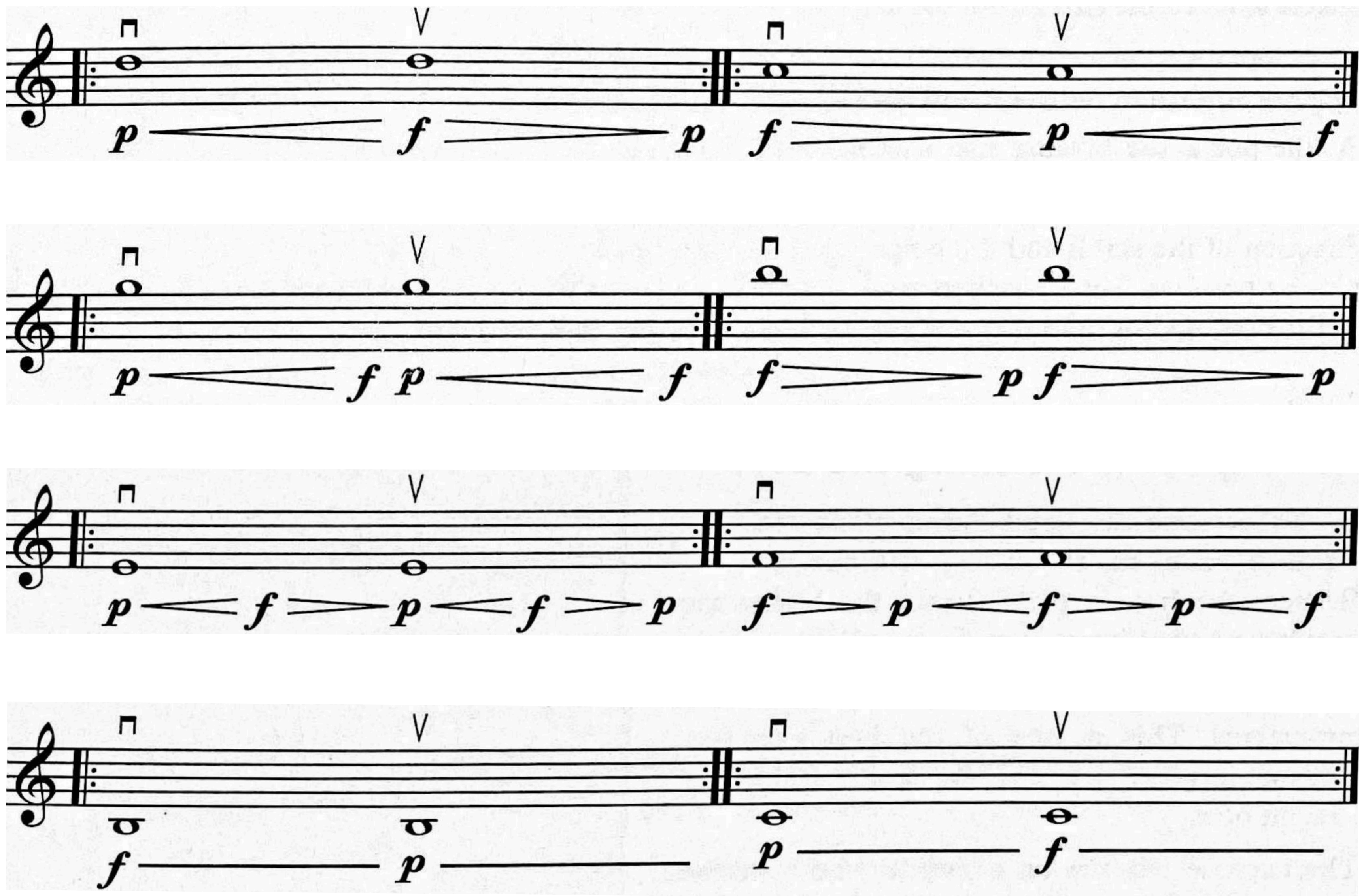
79 80 81 82 83

84 85 86 87 88 89

90 91 92 93 94 95 96

Practicing Dynamics

There's much to learn from violin pedagogy regarding practicing dynamics. For example, Paul Rolland's method suggests practicing crescendos and diminuendos within scales, as shown here:



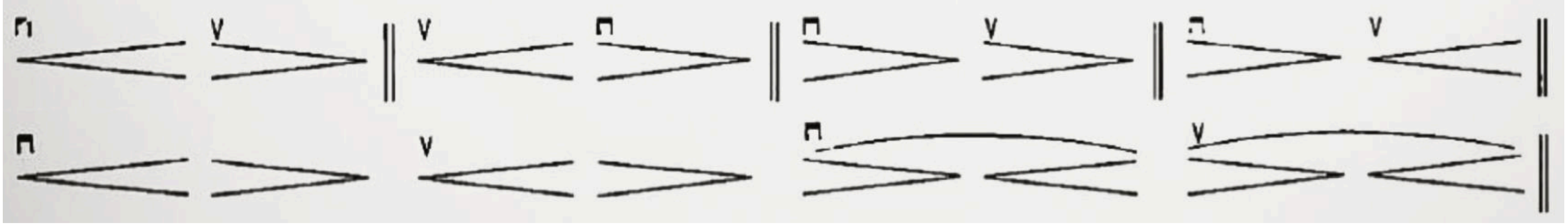
EVEN SPEED =
DIFFERENT SPEEDS ≠

This is an excellent approach to practicing dynamics. Rather than playing scales with a completely even bow speed and sound (unless specifically practicing legato and sustaining), we can explore dynamics in two distinct ways:

1. **Even bow speed with varying dynamics:** By maintaining a consistent bow speed, we can change dynamics by adjusting arm weight.
2. **Variable bow speed:** Here, we get louder or softer by increasing or decreasing the bow speed.

Each approach represents a different technique and experience, so we should practice both.

Galamian uses a similar concept:



Shifting Using Stretches

When we have big shifts into higher positions, Prof. Aaron recommends using “opening shifts,” which involve opening the hand between the thumb and first finger rather than maintaining a fixed hand position within an octave.

- **Ascending shifts:** As you move up, the thumb replaces the fourth finger, moving up a semitone, and the hand continues to open.
- **Descending shifts:** On the way down, the hand closes towards the thumb to form an octave, and then the entire hand moves to complete the shift.

This approach emphasizes focusing on the bottom note rather than the top note. Overly focusing on the top note could lead to feeling nervous and missing the shift, but by anchoring yourself to the lower note, you feel more grounded and can better gauge the interval within your hand.