

Foreword:

It was with great pleasure that I accepted Brad Edwards' request to write this forward for his wonderful book. When I listen to my colleagues at the New York Philharmonic warm up and practice on a daily basis, I realize that we all share one thing in common; a steady diet of logical exercises and scale patterns. Faithfully repeated, those "go to" technical routines maintain my colleagues' high level of artistry. This collection of excellent exercises by Brad Edwards gives new fuel to propel our daily routines. Professor Edwards presents these studies using the same concepts of natural slurs and alternate positions that I use in my own playing. To my amazement, I consistently find in my experiences teaching around the world how often trombonists neglect using natural slurs. Too frequently, players do not even know what a natural slur is or where it occurs on the horn.

Practicing with attention and care is not unlike taking a daily vitamin. A regular visit to this book will undoubtedly help you to play more evenly and consistently and, when used in the precise way that Edwards suggests, will result in your overall improvement. Strengthening your embouchure, increasing your flexibility, improving your slide technique, improving your intonation are direct benefits, plus those resulting from exercises he created for the extreme low and high range. I have been using this collection for quite some time and travel with it often as it fits very nicely in my gig bag. I highly recommend this book to all students and professionals. Bravo Professor Edwards!

Joseph Alessi
Principal Trombone, New York Philharmonic
Juilliard School

About This Book:

Why write another technique book? I've seen many books of technical studies but have yet to encounter one that builds technique in a way that is both methodical and musically satisfying. Technique only has value in serving a musical goal. Another concern with many of the existing technical studies, such as the revered Arban's Method, is that they were originally written for other instruments and don't always address the specifics of our instrument, such as alternate positions or optimal tessitura.

My goal:

Create musically satisfying material specifically designed to build trombone technique.

Trombone Craft: Complete combines three separate volumes published previously. It is designed as a progressive method targeted to high school or college trombone students but can also be useful for professionals as well.

Trombone Craft represents the conclusion of a 'trilogy' of sorts:

1. Lip Slurs
2. Simply Singing for Winds
3. Trombone Craft

These books are meant to complement each other in helping trombonists build a solid, well-rounded technical and musical foundation.

How to Use this Book:

Here are some general guidelines:

1. Technique serves the musical goal. With any of these studies, make a *musical* statement. Be a performer, not a machine.
2. Tension is the enemy. Don't just play fast and tense; be very aware of your tension level. Seek to play effortlessly.
3. Be Patient. Start slowly and build up. Don't choose a tempo that leads to a sloppy outcome. It takes as long as it takes.

Table of Contents:

Part One

#1.1 Two Pieces in B-flat Major	1
#1.2 Tech Builder: D in lowered 4th position	2
#1.3 Two Pieces in E-flat major.....	3
#1.4 Tech Builder: Using Natural Slurs in Legato	4
#1.5 Two Legato Pieces.....	5
Working with the F-Attachment	6
#1.6 Tech Builder: Using the Trigger for C (and sometimes F).....	7
#1.7 Two Pieces in F major.....	8
#1.8 Tech Builder: Chromatic Scales	9
#1.9 Tech Builder: The Trigger B vs. B in 7 th	10
#1.10 Two Pieces in C major	11
#1.11 Two Pieces in G Major.....	12
#1.12 Intervals: Expanding Patterns up to One Octave.....	13
#1.13 Tech Builder: The Trigger B-flat.....	14
#1.14 Two Pieces in A-flat Major.....	15
#1.15 Rhythm Builder: The Dotted Eighth-Sixteenth Rhythm	16
#1.16 Two-Line Tunes: Dotted Eighth-Sixteenth Rhythms	17
#1.17 Memorize This: Flowing Major Scales.....	18
#1.18 Rhythm Builder: Varied Sixteenth-Note Pick-Ups	19
#1.19 Two-Line Tunes: Varied Sixteenth-Note Pickups	20
#1.20 Tech Builder: F in 6 th and Raised 4 th	21
#1.21 Two Pieces in D-flat Major	22
#1.22 Intervals: Accuracy on the Overtone Series.....	23
#1.23 Memorize This: Major Arpeggios.....	24
#1.24 Two-Line Tunes: Major Arpeggios.....	25

Table of Contents (continued):**Part Two**

#2.1	Two Pieces in D Major	26
#2.2	Memorize This: Major Scales in Rapidly-Changing Keys	27
#2.3	A Piece in Two Keys: A-flat and A major	28
#2.4	Rhythm Builder: Eighth-Note Syncopations.....	29
#2.5	“Two-Line” Tunes: Eighth-Note Syncopations	30
#2.6	A Piece in Two Keys: E-flat and E Major	31
#2.7	Rhythm Builder: 6/8 Syncopations, Quarter Note Triplets, Half Note Triplets	32
#2.8	"Two Line" Tunes: Syncopations Using Triplets.....	33
#2.9	Memorize This: Natural and Harmonic Minor Scales	34
#2.10	"Two-Line" Tunes: Natural and Harmonic Minor Scales	35
#2.11	Tech Builder: Accuracy with Higher Notes	36
#2.12	Tech Builder: Improving the Trigger Range.....	37
#2.13	Two-Line Tunes: Improving the Trigger Range	38
#2.14	Memorize This: Melodic Minor	39
#2.15	"Two-Line" Tunes: Melodic Minor	41
#2.16	Memorize This: Minor Arpeggios	42
#2.17	Two-Line Tunes: Minor Arpeggios	43
#2.18	Rhythm Builder: Sextuplets	44
#2.19	Two-Line Tunes: Sextuplets.....	45
#2.20	Tech Builder: Chromatic Scales Using Sextuplets	46
#2.21	"Two-Line" Tunes: Two-Octave Scales	47
#2.22	Memorize This: Dominant 7 th Chords	48
#2.23	One-Line Tunes: Dominant 7 th Chords with Syncopation	49
#2.24	Concert Piece in B-flat	50
	Duet Part.....	51

Table of Contents (continued):**Part Three**

#3.1 Two Pieces in C Major	52
#3.2 Rhythm Builder: The Dotted Rhythm in 6/8	53
#3.3 Two-Line Tunes: Dotted Rhythms in 6/8	54
#3.4 "Two-Line" Tunes: Two-Octave Scales with Syncopation	55
#3.5 Tech Builder: A-sharp/B-flat in raised 5 th	56
#3.6 Two Pieces in G-flat Major.....	57
#3.7 Two Pieces in B and F-sharp Major	58
#3.8 Rhythm Builder: Beat Subdivisions	59
#3.9 "Two-Line" Tunes: Beat Subdivisions	60
#3.10 Memorize This: Two-Octave Arpeggios.....	61
#3.11 Three Short Pieces with Two-Octave Arpeggios	62
#3.12 Rhythm Builder: Metric Challenges.....	63
#3.13 Two-Line Tunes: Metric Challenges	64
#3.14 Tech Builder: Broken Arpeggios	65
#3.15 "Two-Line" Tunes: Broken Arpeggios.....	66
#3.16 Tech Builder: Developing Accuracy in the High Range.....	67
#3.17 Two Line Tunes: High Range Security.....	68
#3.18 Tech Builder: Developing the Pedal Register	69
#3.19 Two-Line Tunes: The Pedal and Trigger Range	70
#3.20 Tech Builder: Diminished 7 th Chords.....	71
#3.21 Three Short Pieces with Diminished 7 th Chords.....	72
#3.22 Tech Builder: Dissonant Leaps.....	73
#3.23 Two Fanfares.....	74
#3.24 Concert Piece.....	75

Table of Contents (continued):**Appendix 1: Developing the Legato Tongue**

App 1.1: First Exercises	76
App 1.2 Integrating with Slide Movement	77

Appendix #2: Double-Tonguing

App 2.1: Developing the "kah" Tongue	78
App 2.2: Developing the "taka" Alternation with Some Slide Movement	79
App 2.3: Gliding Through Positions	80
App 2.4: Two-Note Patterns	81
App 2.5: Speeding Up and Slowing Down	83
App 2.6: Longer Patterns	84
App 2.7: Scale Patterns	85

Appendix #3: Triple Tonguing

App 3.1: Developing the Triple Tongue	87
App 3.2: Gliding Through Positions	89
App 3.3: Scale Patterns	90

Appendix #4: Pattern-Building

App 4.1: Major Scales, Range of a 9th - slow to fast	91
Table of Major Scales - stepwise sequence	92
App 4.2: Major Scales - stepwise sequence	93
App 4.3: Major and Melodic Minor Scales, Two Octaves	101
App 4.4: Two-Octave Major and Chromatic Scales	105
App 4.5: Varied Scale Patterns	109
App 4.6: Varied Arpeggio Patterns	112
App 4.7: Patterns from Selected Repertoire	116

Appendix #5: Interval Accuracy

App 5.1: Octave Scales	122
App 5.2: Overtone Accuracy	123
App 5.3: Expanding Scales	124
App 5.4: Interval Practice from Selected Repertoire	126
App 5.5: Wide Leaps in Legato	130
App 5.6: Varied Fifths	132
App 5.7: Varied Leaps	133

Table of Contents (continued):**Appendix #6: Developing the High Range**

Introduction	134
App 6.1: Glisses and Slurs	135
App 6.2: Glissando Scales	136
App 6.3: Arpeggios	139

Appendix 7: Tone and Tuning

App 7.1: Opening Up the Sound.....	141
App 7.2: Working with a Tuner.....	142
App 7.3: Working with a Drone	144
App 7.4: A Variation on the Remington Long Tones.....	145
App 7.5: Expanding Scales	146
App 7.6: Tonic-Dominant Patterns in Different Musical Contexts.....	147
App 7.7: Tuning Fifths and Octaves Over a Drone	149
App 7.8: Tuning Major Thirds Over a Drone.....	150
App 7.9: Drone Melodies	151
App 7.10: Chord Progressions (two players)	155
App 7.11: Two-Voice Chorale: “Nun Danket all Gotte”.....	156
App 7.12: Two-Voice Bordogni Reductions	157

Appendix 8: Flow Exercises (sing, buzz, play)

Introduction	162
App 8.1: Neighbor Tones.....	163
App 8.2: A Singing Scale Pattern	164
App 8.3: An Octave Neighbor Tone Pattern	165
App 8.4: Arpeggiating a Tonic-Dominant Progression.....	166
App 8.5: Diatonic Intervals.....	167
App 8.6: Quartal Intervals	168
App 8.7: Ten Other Flow Patterns	169
About the Author.....	170

2.

#1.2 Tech Builder: D in lowered 4th position

The 6th partial D in 4th position (lowered because it is usually sharp) is a useful passing tone or neighbor tone in the vicinity of E-flat.

Tuning Exercise (Use a tuner but don't stare at it. Listen first, then look)

a.

1 b4 b4 b4 b4 b4

There is only one rule when choosing positions: use what will sound best. Here's the catch: an alternate position might not sound better until you've practiced it enough! In general, alternates might be better for notes that are (1) smoother, (2) shorter, and (3) softer.

Etude

♩ = 100

b.

mp *mf* *mp* *p* *mf*

For practice in developing the legato tongue, see Appendix #1: "Developing the Legato Tongue"

#1.3 Two Pieces in E-flat major

Not all of the alternate positions have been marked in. Apply what you have learned to decide when to use D in lowered 4th.

a. $\text{♩} = 92$

b. $\text{♩} = 112$

See also: Bleger 31 Studies #7, Bordogni Melodious Etudes, Bk. 1 #6, #31; Hering 40 Progressive Etudes, #22; Kopprasch 60 Studies, Bk.1 #9 [tenor clef],

#1.12 Intervals: Expanding Patterns up to One Octave

Remember these words of wisdom: "Practice fast, progress slow. Practice slow, progress fast." Check your embouchure corners in a mirror as you play this. Strive for an "efficient" embouchure which doesn't move too much as you articulate leaps. You'll probably see some movement. Over time, see if you can get the same results with less movement. Be patient, it takes time.

The musical score is written in bass clef, 4/4 time, with a tempo of quarter note = 108. It consists of seven staves of music. The key signature starts with two flats (B-flat and E-flat), changes to one flat (B-flat) in the second staff, and then to one sharp (F-sharp) in the third staff. The music features various interval patterns, including eighth and sixteenth notes, with articulation marks like '1 V', 'b4', 'b2 V', and '(6)'. The final staff ends with a double bar line and a fermata.

16.

#1.15 Rhythm Builder: The Dotted Eighth-Sixteenth Rhythm

Few rhythms are performed incorrectly as often as the dotted-eighth sixteenth. The most common error is a "one-size-fits-all" sixteenth note which ends up being too fast in slow tempos and too slow in fast tempos

Basic rhythm exercise

Try this at a variety of tempos. Make sure the sixteenth note is accurate.

♩ = 63-104

Two staves of music in bass clef, 4/4 time, with a key signature of two flats. The first staff contains a sequence of dotted eighth-sixteenth notes, followed by eighth notes, and then a final dotted eighth-sixteenth note. The second staff continues with similar rhythmic patterns, including eighth notes and dotted eighth-sixteenth notes.

Accuracy Duet

Have a partner play the bottom line to ensure accuracy.

♩ = 63-104

Two staves of music in bass clef, 4/4 time, with a key signature of two flats. The top staff features a sequence of eighth notes with triplet markings (3) above them. The bottom staff features a sequence of dotted eighth-sixteenth notes with triplet markings (3) below them. The two staves are designed to be played together to ensure rhythmic accuracy.

Etude

It is often harder to maintain accuracy on longer strings of dotted rhythms.

♩ = 104

Four staves of music in bass clef, 4/4 time, with a key signature of two flats. The first staff starts with a dynamic marking of *mf* and includes crescendo and decrescendo hairpins. The second staff starts with a dynamic marking of *mp*. The third staff starts with a dynamic marking of *f* and includes a dynamic marking of *p*. The fourth staff starts with a dynamic marking of *mf* and includes a dynamic marking of *f* and a *cresc.* marking.

#1.16 Two-Line Tunes: Dotted Eighth-Sixteenth Rhythms

Alternate positions are not marked in. Please look over the music and mark them in.

$\text{♩} = 88$

a. *mp* *mf* *f* *mf*

b. *mf* *mp* *f*

c. *mf* *p* *mf*

d. *mp* *mf* *f* *mp*

e. *mp* *f*

See also: Bleger 31 Studies #19; Blume 36 Studies #11, #12, #21; Bordogni Melodious Etudes #28 (#30); Hering 40 Progressive Studies #26; Kopprasch 60 Selected Studies, Bk. 1, #26; Tyrell 40 Progressive Studies #7; Voxman Selected Studies p.14.

22.
 #1.21 Two Pieces in D-flat Major

a. $\text{♩} = 84$

b. $\text{♩} = 152$

The musical score consists of two exercises, 'a' and 'b', both in D-flat major. Exercise 'a' is in 4/4 time with a tempo of quarter note = 84. It spans five staves. The first staff begins with a forte (*f*) dynamic and features a sixteenth-note pattern with slurs and accents. The second staff has a mezzo-forte (*mf*) dynamic and includes a triplet of eighth notes. The third staff returns to forte (*f*) and features a sixteenth-note pattern with slurs and accents. The fourth staff has a mezzo-forte (*mf*) dynamic and features a sixteenth-note pattern with slurs and accents. The fifth staff has a mezzo-piano (*mp*) dynamic and features a sixteenth-note pattern with slurs and accents, ending with a crescendo (*cresc.*). Exercise 'b' is in 3/4 time with a tempo of quarter note = 152. It spans five staves. The first staff begins with a mezzo-forte (*mf*) dynamic and features a sixteenth-note pattern with slurs and accents. The second staff has a forte (*f*) dynamic and features a sixteenth-note pattern with slurs and accents. The third staff has a mezzo-piano (*mp*) dynamic and features a sixteenth-note pattern with slurs and accents. The fourth staff has a mezzo-forte (*mf*) dynamic and features a sixteenth-note pattern with slurs and accents. The fifth staff has a forte (*f*) dynamic and features a sixteenth-note pattern with slurs and accents, ending with a crescendo (*cresc.*).

#2.3 A Piece in Two Keys: A-flat and A major

Can you play this just as well in the sharp key?

a.

$\text{♩} = 92$

(#4)

$\flat\flat 3$

f *mf*

f *mf* *mp*

p *mp* *f*

cresc. *mf* *ff*

Detailed description of exercise 'a': This exercise is written in bass clef, 4/4 time, and the key of A-flat major (three flats). It begins with a tempo marking of quarter note = 92. The first staff starts with a forte (*f*) dynamic and includes a fingering of 4 for the fourth finger. The second staff continues with *f*, *mf*, and *mp* dynamics. The third staff features a piano (*p*) dynamic, *mp*, and *f*. The fourth staff includes a crescendo (*cresc.*), *mf*, and fortissimo (*ff*) dynamics. There are also fingering markings for 1 and $\flat\flat 3$.

See also: Tyrell 40 Progressive Studies #14

b.

$\text{♩} = 92$

f *mf*

f *mf* *mp*

p *mp* *f*

cresc. *mf* *ff*

Detailed description of exercise 'b': This exercise is written in bass clef, 4/4 time, and the key of A major (three sharps). It begins with a tempo marking of quarter note = 92. The first staff starts with a forte (*f*) dynamic and includes a fingering of 6. The second staff continues with *f*, *mf*, and *mp* dynamics. The third staff features a piano (*p*) dynamic, *mp*, and *f*. The fourth staff includes a crescendo (*cresc.*), *mf*, and fortissimo (*ff*) dynamics.

See also: Bordogni Melodious Etudes, Bk.1, #33 #50 #56; Tyrell 40 Progressive Studies, #25; Voxman Selected Studies p.43;

32.

#2.7 Rhythm Builder: 6/8 Syncopations, Quarter Note Triplets, Half Note Triplets

Basic Rhythm Exercise

Use a metronome!

♩ = 88

a.

Basic Rhythm Exercise notation in bass clef, 6/8 time. It consists of two systems of two staves each. The first system is labeled 'a.' and contains a quarter note triplet followed by a half note triplet. The second system is labeled 'b.' and contains a half note triplet followed by a quarter note triplet. The notation includes various rhythmic patterns such as eighth notes, quarter notes, and dotted notes.

Developing the Quarter Note and Half Note Triplets

The trick to placing the second and third notes of these longer triplets is simply to know where each note falls in relation to the beat. Some fall as triplet pick-ups to a downbeat ("ba-oom") and others fall as the triplet after the downbeat ("oom-ba"). Notice in the Basic Rhythm Exercise above that letter "a" is the same as a quarter note triplet and letter "b" is the same as a half note triplet.

Developing the Quarter Note and Half Note Triplets notation in 4/4 time. It shows two systems of two staves each. The first system shows quarter note triplets on the top staff and eighth note triplets on the bottom staff. The second system shows half note triplets on the top staff and eighth note triplets on the bottom staff. Each triplet is marked with a '3' and a bracket.

Use a metronome!

♩ = 88

Developing the Quarter Note and Half Note Triplets notation in bass clef, 4/4 time. It consists of three systems of two staves each. The notation includes quarter note triplets and half note triplets, with various rhythmic patterns and accents. Each triplet is marked with a '3' and a bracket. The tempo is indicated as ♩ = 88.

#2.14 Memorize This: Melodic Minor

From here on, you will begin to see tenor clef more often.

a. $\text{♩} = 72$

10 staves of musical notation in bass clef, showing the melodic minor scale with various markings (accents, slurs, fermatas, and fingering numbers like b4, 1, 6, #4).

Tenor clef

10 staves of musical notation in tenor clef, showing the melodic minor scale with various markings (accents, slurs, fermatas, and fingering numbers like #4).

#2.15 "Two-Line" Tunes: Melodic Minor

a. $\text{♩} = 88$ $\flat 4$
f
mp *f*
 $\flat 4$

b. $\text{♩} = 108$
p *mf*
f *ff* *p*

c. $\text{♩} = 80$ $\sharp 5$
f *mp* *f*
p *cresc.* *f*
(7)

d. $\text{♩} = 88$ $\sharp 4$ $\sharp 4$
p *mf*
(6) *p* 6
f (6) (6)

#2.23 One-Line Tunes: Dominant 7th Chords with Syncopation

These lend themselves well to swung eighth notes and semi-legato tonguing. You can also substitute key signatures for extra practice (for example, line 2 in E instead of E-flat)

a. $\text{♩} = 120-160$

mf

mf *f*

f (**b3**) (**4**)

f *sfz*

b.

mp

mf (**b4**)

mp *cresc.* *f*

For the G7 chord above, I didn't indicate positions. Experiment!

f *mp* *f*

52.

#3.1 Two Pieces in C Major

a. $\text{♩} = 116$ $\flat 4$

mp *p* *p*

mf *f* *mp*

f *mp* *mp* *cresc.* *mf*

mp *cresc.* *f* *mp*

b. $\text{♩} = 88$

mf

p *f* *mp*

f *mp* *cresc.*

ff *mf*

See also: Bordogni/Rochut, Melodious Etudes Bk. 1, #9, #37; Tyrell 40 Progressive Studies, #6; Voxman Selected Studies, p.18

#3.8 Rhythm Builder: Beat Subdivisions

To help develop the 'feel' of the quintuplet, try thinking of a word with five syllables. I prefer to use "university." This word breaks naturally into a 2+3 grouping. For a 3+2 feel, you might try, "merrily rolling."

$\text{♩} = \text{c.60}$

3 5 5 3 5 6 3 3 3 5 6 3 3 3 3 5 3 5 5 5 6 6 3 3 3 3 5 5 5 6

Etude

$\text{♩} = \text{c.60}$

mp *mf* *mf* *f* *mf*

#3.15 "Two-Line" Tunes: Broken Arpeggios

You can practice these fast and sloppy or slow and accurate. Which do you think yields more benefit?

Irish Jig (♩ = c.92)

a. Musical notation for the first exercise, Irish Jig. It consists of two staves in bass clef with a key signature of two sharps (F# and C#) and a 12/8 time signature. The first staff starts with a dynamic marking of *mf* and the second staff with *f*. The piece features a series of broken arpeggios.

Ragtime (♩ = 76)

b. Musical notation for the second exercise, Ragtime. It consists of two staves in bass clef with a key signature of three flats (Bb, Eb, and Ab) and a 2/4 time signature. The first staff starts with a dynamic marking of *mf* and the second staff with *f*. The piece features a series of broken arpeggios.

Waltz (♩ = 156)

c. Musical notation for the third exercise, Waltz. It consists of two staves in bass clef with a key signature of one flat (Bb) and a 3/4 time signature. The first staff starts with a dynamic marking of *mf* and the second staff with *mp*. The piece features a series of broken arpeggios.

Swing (♩ = 132)

d. Musical notation for the fourth exercise, Swing. It consists of two staves in bass clef with a key signature of three flats (Bb, Eb, and Ab) and a 4/4 time signature. The first staff starts with a dynamic marking of *f* and the second staff with *ff*. The piece features a series of broken arpeggios. There are also markings for *f* and *mp* in the middle of the second staff.

#3.21 Three Short Pieces with Diminished 7th Chords

The image displays three musical pieces, labeled a, b, and c, each with its own system of staves and dynamic markings.

Piece a: The first system is in bass clef, 4/4 time, with a tempo marking of quarter note = 63. It begins with a *mp* dynamic and features a five-measure phrase with a slur and a '5' above it. The second system continues with a *ff* dynamic and includes an *accel.* marking. The third system concludes with a *rit.* marking and a *ff pp* dynamic.

Piece b: The first system is in bass clef, 12/8 time, with a tempo marking of quarter note = 120. It starts with a *mf* dynamic and includes a key signature change from B-flat to B-natural (indicated by $\flat 4 \sharp 4$). The second system begins with a *pp* dynamic and features a *cresc.* marking. The third system starts with a *f* dynamic and includes a *ff* dynamic.

Piece c: The first system is in bass clef, 3/4 time, with a tempo marking of *Adagio (rubato)*. It begins with a *mp* dynamic and features a five-measure phrase with a slur and a '3' above it. The second system continues with a *mf* dynamic and includes a *ff* dynamic. The third system starts with a *mf* dynamic and includes a *ff* dynamic. The fourth system concludes with a *f sub.p* dynamic.

76.

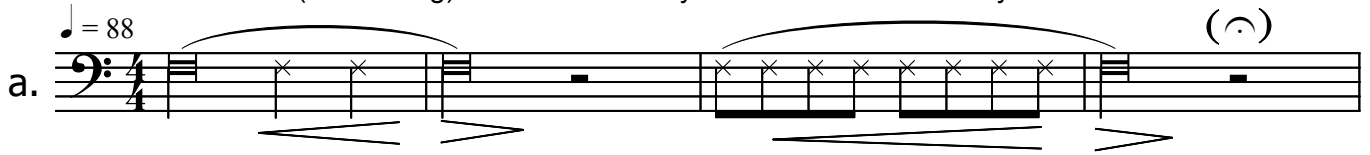
Appendix 1: Developing the Legato Tongue

App 1.1: First Exercises

Think of a very light "d" in "dah" with minimal interruption in the air. Use only enough "d" to prevent it from sounding like a long tone.

Blowing, then buzzing on the mouthpiece

Just blow air (no buzzing). Use the back of your hand to feel a steady breeze.

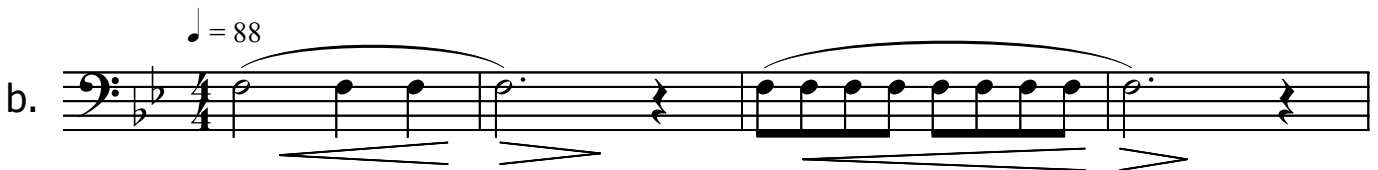
a. 


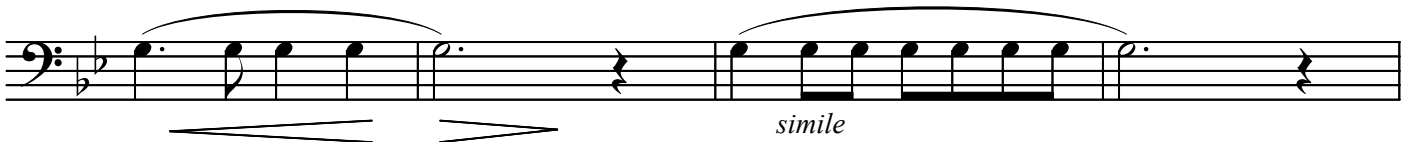
Buzz the mouthpiece with steady air blowing against back of the hand.



On the trombone

Play with a steady, beautiful sound. As singers sometimes say, "Put the vowel on the downbeat."

b. 



Appendix 2: Double Tonguing

App 2.2: Developing the "taka" Alternation with Some Slide movement

Make the "tah" and "kah" sound the same. If you wish, you may try the syllables "dah" and "gah."
Get the quality first and the speed will come. Relaxation is key.

♩ = c.120-184

T K T K T T K T K T *simile*

6

Appendix 2: Double Tonguing App 2.4: Two-Note Patterns

These patterns help improve slide accuracy. Make sure the slide moves at the exact right moment.

♩ = 112-144

b⁴

a.

b.

#4

b⁴

Appendix #3: Triple Tonguing

App 3.1: Developing the Triple Tongue

Put the "kah" on the third note of the triplet, not the second. This makes the downbeat stronger.

♩ = 108-144

a.

simile

Don't try to go too fast. Make the notes clear and even.

♩ = 108-176

b.

c.

Appendix 4: Pattern-Building
App 4.2: Major Scales - Stepwise Sequence

♩ = 72-96

The image displays two major scale exercises, each consisting of four staves of music. The first exercise is for the F major scale (1. F), and the second is for the G major scale (2. G). Both are written in bass clef with a 4/4 time signature. The tempo is indicated as quarter note = 72-96. The first staff of each exercise shows the scale starting on the first line, with a '6' above the first measure and a '1' above the fifth measure. The second staff shows the scale starting on the second line, with a '(1)' above the first measure and a '(b4)' above the fourth measure. The third staff shows the scale starting on the third line, with a '(b4)' above the fourth measure and a '6' above the sixth measure. The fourth staff shows the scale starting on the fourth line, with a '1' above the first measure and a '6' above the sixth measure. The second exercise (2. G) follows a similar pattern, with the first staff starting on the first line (marked with 'b2' and '1'), the second on the second line (marked with '(b4)' and '1'), the third on the third line (marked with '(b4)' and '1'), and the fourth on the fourth line (marked with '(1)' and '1 b2').

When a quick change of slide direction is needed, it is usually easier "bounce out" from a close position than to "snap back" from a long position where the elbow is already extended.

Appendix 4: Pattern-Building

App 4.5: Varied Scale Patterns

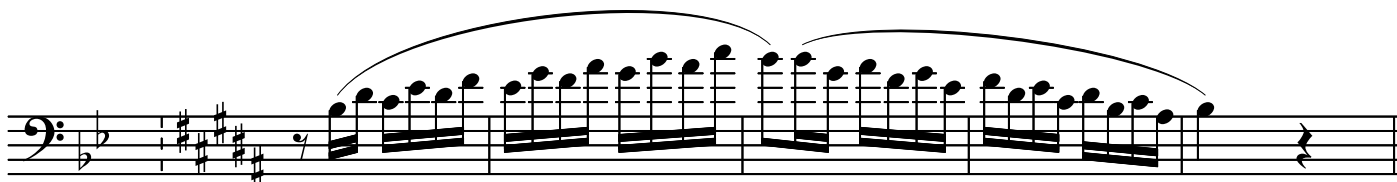
Think about alternate positions with these.

"Legato Thirds"

a.



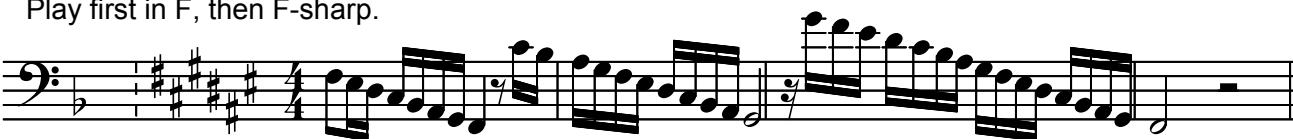
Play first in G-flat, then G



"Descenders"

Play first in F, then F-sharp.

b.



Remember that the lower notes thrive on warmer, less forceful air.

Appendix 4: Pattern-Building
App 4.6: Varied Arpeggio Patterns

"Chord Sequence"

a.

The first two staves of the exercise are in G-flat major (two flats) and 6/8 time. The first staff contains two measures of eighth-note arpeggios: G-flat-B-flat-D-flat-E-flat-F-flat-G-flat and G-flat-A-flat-B-flat-C-flat-D-flat-E-flat-F-flat. The second staff continues with two more measures of eighth-note arpeggios: G-flat-A-flat-B-flat-C-flat-D-flat-E-flat-F-flat and G-flat-A-flat-B-flat-C-flat-D-flat-E-flat-F-flat.

Play first in G-flat, then G

The third and fourth staves show the transition to G major (one sharp). The third staff contains two measures of eighth-note arpeggios: G-A-B-C-D-E-F#-G and G-A-B-C-D-E-F#-G. The fourth staff continues with two more measures of eighth-note arpeggios: G-A-B-C-D-E-F#-G and G-A-B-C-D-E-F#-G.

The fifth and sixth staves show the transition to G minor (two flats). The fifth staff contains two measures of eighth-note arpeggios: G-A-flat-B-flat-C-flat-D-flat-E-flat-F-flat-G and G-A-flat-B-flat-C-flat-D-flat-E-flat-F-flat-G. The sixth staff continues with two more measures of eighth-note arpeggios: G-A-flat-B-flat-C-flat-D-flat-E-flat-F-flat-G and G-A-flat-B-flat-C-flat-D-flat-E-flat-F-flat-G.

The seventh and eighth staves show the transition to G augmented (two sharps). The seventh staff contains two measures of eighth-note arpeggios: G-A-B-C-D-E-F#-G# and G-A-B-C-D-E-F#-G#. The eighth staff continues with two more measures of eighth-note arpeggios: G-A-B-C-D-E-F#-G# and G-A-B-C-D-E-F#-G#.

The ninth and tenth staves show the transition to 3/8 time. The ninth staff contains two measures of eighth-note arpeggios: G-A-B-C-D-E-F#-G and G-A-B-C-D-E-F#-G. The tenth staff continues with two more measures of eighth-note arpeggios: G-A-B-C-D-E-F#-G and G-A-B-C-D-E-F#-G.

The eleventh and twelfth staves continue in 3/8 time. The eleventh staff contains two measures of eighth-note arpeggios: G-A-B-C-D-E-F#-G and G-A-B-C-D-E-F#-G. The twelfth staff concludes with two more measures of eighth-note arpeggios: G-A-B-C-D-E-F#-G and G-A-B-C-D-E-F#-G.

120.

Appendix 4: Pattern-Building, App 4.7: Patterns from Selected Repertoire.

Play first in bass clef (A-flat), then in tenor (E-flat)

g. (cont.)

Play first in bass clef (B-flat), then in tenor (F)

C.P.E. Bach, Flute Sonata

Play first in bass clef (C), then in tenor (G) [B-flat will become F natural]

h.

Continued on the next page...

124.

Appendix #5: Interval Accuracy

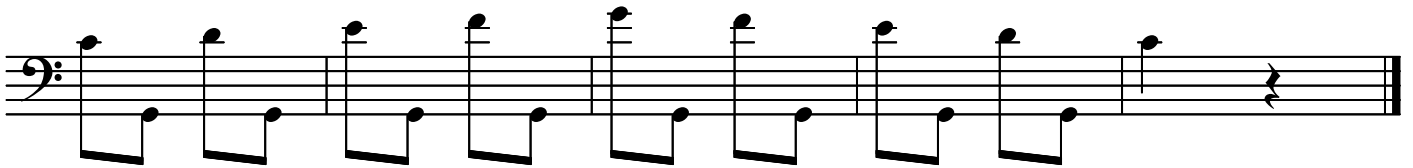
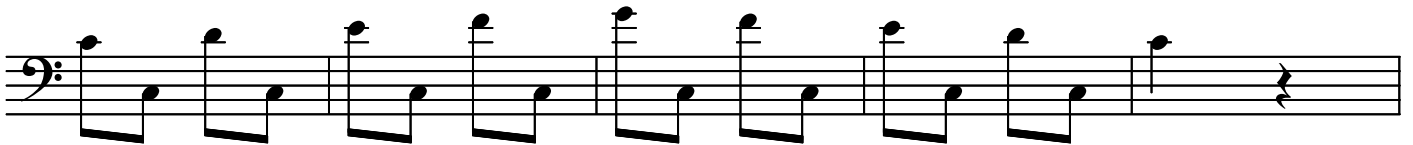
App 5.3: Expanding Scales

Keep the notes full in tone. Don't let them become too pecky (starved for air).

Ascending

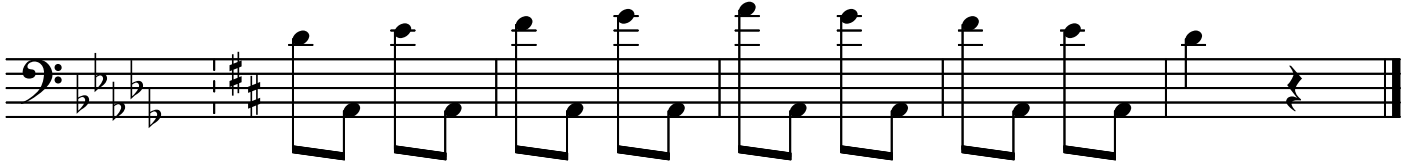
♩ = 60-120

a. 



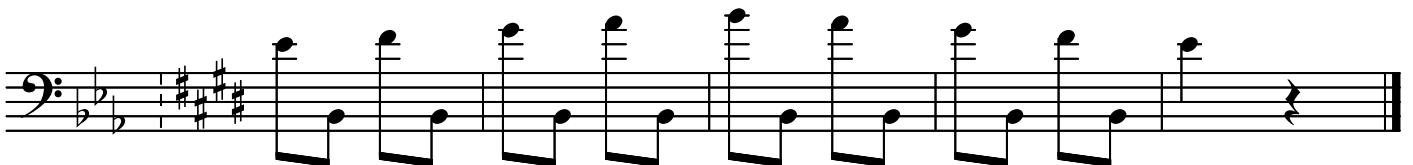
Play this first in D-flat, then in D.

b. 



Play this first in E-flat, then in E.

c. 



Appendix 5: Interval Accuracy, App 5.4: Interval Practice from Selected Repertoire.

Bach Cello Suite, No. 1, Menuett II

b.

The image displays a musical score for the second menuet of the first cello suite by J.S. Bach. The score is written in bass clef, 3/4 time, and B-flat major. It consists of eight staves of music. The first staff is marked with a 'b.' and contains the beginning of the piece. The subsequent staves continue the melody, featuring various intervals and phrasing. The piece concludes with a double bar line on the eighth staff.

144.

Appendix 7: Tone and Tuning App 7.3: Working with a Drone

As you detune, you will hear "beats." Faster beats mean you are farther out of tune. Gliss slowly enough that you can really hear the beats change. Listen for that moment when the two notes lock into place.

Free in tempo

Student

Teacher/
Drone

slow gliss

slow gliss

simile

4

5

4

Appendix 7: Tone and Tuning

App 7.11: Two-Voice Chorale, "Nun danket alle Gott"

Play these slowly enough to really hear the intonation!

a.

Two staves of musical notation in bass clef, 4/4 time, one flat key signature. The first staff contains a sequence of chords and notes, with some notes marked with a fermata. The second staff continues the sequence, also with fermatas.

This can be done in A or in A-flat. The small accidentals in parentheses are for the key of A major.

b.

Two staves of musical notation in bass clef, 4/4 time, two sharps key signature. The first staff contains a sequence of chords and notes, with some notes marked with a fermata. The second staff continues the sequence, also with fermatas.

c.

Two staves of musical notation in bass clef, 4/4 time, two sharps key signature. The first staff contains a sequence of chords and notes, with some notes marked with a fermata. The second staff continues the sequence, also with fermatas.

d.

Two staves of musical notation in bass clef, 4/4 time, one flat key signature. The first staff contains a sequence of chords and notes, with some notes marked with a fermata. The second staff continues the sequence, also with fermatas.

Appendix 7: Tone and Tuning

App 7.12: Two-Voice Bordogni Reductions

These duets have a variety of applications. They can stand alone as simple duets to provide intonation practice or the bass line can work as an accompaniment to the corresponding "Rochut" etude.

If you wish to play along with the existing "Rochut" etude, you will find references to line numbers: L1, L2, etc. As of 2012, Carl Fischer has released a newer version of these vocalises. The new edition sometimes places the music on different lines. In the line number references below, the small italic numbers (*L1*) refer to the older edition. The larger, bold numbers (**L1**) refer to the newer edition. This new edition sometimes includes additional measures rest or even doubles certain measures. Those changes are marked with an asterisk.

Based on Bordogni/Rochut #2 (originally Bordogni, Vol. 1 #2)

a.

ff *L2* **L2**

L3 **L3** *L4* **L4**

L5 **L5** *L6* *L7* **L6**

L8 **L7** *L9* *L10* **L8**

L11 **L9** *L12* **L10** *L13*

Appendix 8: Flow Exercises (sing, buzz, play)

The essential thing when you play any instrument is to keep your "singing mind" awake. As Arnold Jacobs put it, be a great singer in your mind and let your instrument reflect this. Pick any tune and sing or buzz it before playing it on your instrument. Don't worry if it doesn't feel the same as when you play; that's not the important thing. Instead, focus on how you want it to sound. By going back and forth between your instrument and singing/buzzing, you can develop a more natural singing approach without focusing too much on mechanics.

When buzzing, take a deep relaxed breath and buzz with an easy sound. Don't force. A good buzz is a happy balance between the extremes of tight/constricted and loose/airy. In legato, keep a nice steady stream of air flowing. You can get feedback by holding tissue paper or a pinwheel in front of the mouthpiece (an incentive spirometer is also useful for this). I prefer not to tongue when buzzing legato.

Here is a useful trick: as you are taking the mouthpiece out or putting it back into the trombone, use that 'transition time' to sing a few notes. This is very good for the ear.

Below each sing/buzz/play line you will see chord changes which can be played on the piano. If you have a keyboard available, play the chords while singing or even while buzzing. Hearing those chords provides an excellent reference to train your ear.

The patterns presented are relatively simple. However you can be creative and make up your own patterns. A wonderful exercise is to simply play a chord on the piano and then make up melodies that fit within that harmony.

At times, these patterns may not fit within your vocal range. For female voices, simply sing up an octave as needed. However, continue to buzz/play in the printed octave. For male voices, learn to use your falsetto or "head voice" to extend your range higher without straining.

These kinds of patterns can also be useful in a warm-up or warm-down routine.

I have written another book, Simply Singing for Winds, which is a large collection of simple tunes, most of which are ideally suited to this "sing, buzz, play" approach.

Appendix 8: Flow Exercises (sing, buzz play)

App 8.1: Neighbor Tones

The primary goal of flow exercises is the development of an easy, beautiful tone. As you change notes, don't tongue. Choose a leisurely tempo.

a.

Sing 1x Buzz; 2x Play (no tongue)

Accomp.

Sing 1x Buzz; 2x Play (no tongue)

Sing 1x Buzz; 2x Play (no tongue)

b.

Sing 1x Buzz; 2x Play (no tongue)

Sing 1x Buzz; 2x Play (no tongue)

Sing 1x Buzz; 2x Play (no tongue)