

Sample pages from...  
Brad Edwards

# ***Trombone Craft***

***Complete Version***  
*(Volumes 1-3 combined)*

***A musical approach to building  
tone and technique***

Tenor Trombone (with F-attachment)

© Brad Edwards, 2012, All rights reserved.

# Trombone Craft Complete

We all need to build tone and technique. Why not do it in a musical way? Instead of pounding away at a mindless scale pattern, why not play a piece that uses lots of scales? Unlike other technique books, this book was designed for trombone from the ground up.

## Quick summary:

- **Motivation through musical interest**  
*If students like a piece musically, they are more likely to spend extra time polishing it.*
- **Ideas are linked and reinforced**  
*After a page helping students develop D in alternate 4th, two short pieces in E-flat major are presented.*
- **Pieces of reasonable length**  
*In a lesson, time is precious. These exercises get to the point quickly using short exercises and half-page etudes.*
- **A greater variety of key signatures**  
*Doesn't get stuck in that B-flat / E-flat rut.*
- **Help with rhythm**  
*Some pages focus in on common rhythm trouble spots, such as the dotted-eighth sixteenth.*
- **Cross-referencing to other books**  
*A big time-saver in lessons! Quick, where can you find etudes that help build the D-flat major scale? After the two that appear in this book you'll see cross-references to: Bleger's 31 Studies #12; Hering's 40 Progressive Etudes #28 and #36 and Voxman's Selected Studies, p.22*
- **Patterns to be memorized**  
*Scale and arpeggio patterns with musical shape.*
- **Length: 50 pages**
- **Special appendices to help with special areas including:**
  - **Developing the legato tongue** {appendix one}
  - **Developing the high range** {appendix two}
  - **Developing the double tongue** {appendix three}
  - **Scale Patterns** {appendix four}  
*OK, so you don't want to miss out on the traditional "grunt work" of scale patterns, don't worry.*
  - **Long Tones and Tuning Exercises** {appendix five}  
*Includes exercises to be played over a tuning drone and exercises designed for use with a tuner.*
  - **Flow Exercises (sing, buzz, play)** {appendix six}  
*Good for warming up, warming down, improving tone, reducing tension.*

## How to Order Trombone Craft Complete:

Available for \$35. This book can be ordered using PayPal through the BoneZone.org website. Questions? Email me: brad "at" bonezone.org

## **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 <sup>th</sup> .....	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 <sup>th</sup> and Raised 4 <sup>th</sup> .....	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 <sup>th</sup> Chords .....	48
#2.23	One-Line Tunes: Dominant 7 <sup>th</sup> 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 <sup>th</sup> .....	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 <sup>th</sup> Chords.....	71
#3.21 Three Short Pieces with Diminished 7 <sup>th</sup> 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.

Musical notation for tuning exercise 'a' in bass clef, 4/4 time. It consists of three staves. The first staff has a whole note E-flat, a quarter note D, a quarter note E-flat, and a whole note E-flat. The second staff has a quarter note E-flat, a quarter note D, a quarter note E-flat, a quarter note D, a quarter note E-flat, a quarter note D, a quarter note E-flat, and a quarter note D. The third staff has a quarter note E-flat, a quarter note D, a quarter note E-flat, a quarter note D, a quarter note E-flat, a quarter note D, a quarter note E-flat, and a quarter note D. Accents and 'b4' markings are present above various notes.

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.

Musical notation for etude 'b' in bass clef, 4/4 time. It consists of six staves. The first staff has a tempo marking of quarter note = 100, a dynamic marking of *mp*, and a dynamic marking of *mf*. The second staff has a dynamic marking of *mp*. The third staff has a dynamic marking of *p* and a dynamic marking of *mf*. The fourth staff has a dynamic marking of *p* and a dynamic marking of *mf*. The fifth staff has a dynamic marking of *p* and a dynamic marking of *mf*. The sixth staff has a dynamic marking of *p* and a dynamic marking of *mf*. The notation includes slurs, accents, and 'b4' markings.

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],

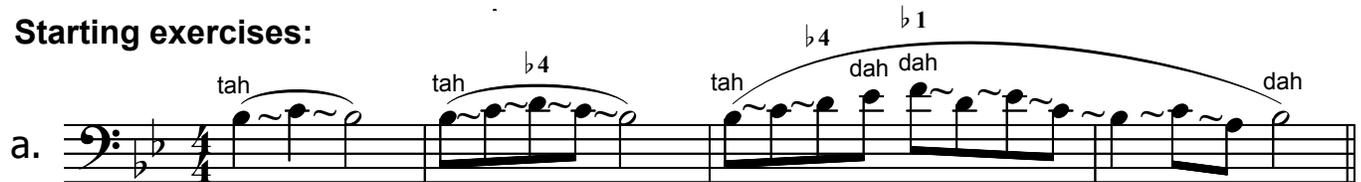
4.

### #1.4 Tech Builder: Using Natural Slurs in Legato

There are two schools of thought concerning the use of natural slurs: (1) legato tongue everything for consistency and (2) use natural slurs whenever possible to keep the tongue out of the airstream. I advise this: when practicing, use natural slurs because they will help you refine embouchure control. When performing, use whatever sounds best.

In these exercises, play close attention to the articulation marks. The tilde symbol (~) indicates a natural slur between notes. When playing a natural slur, move the slide quickly and lightly without tonguing.

#### Starting exercises:

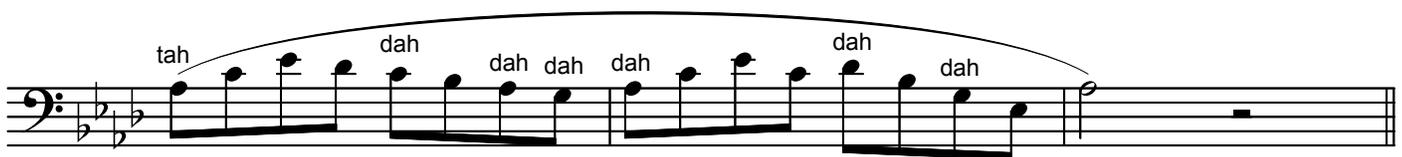
a. 

To keep the page from getting too crowded, I won't use the "~" anymore. If you don't see "tah" or "dah," assume a natural slur.

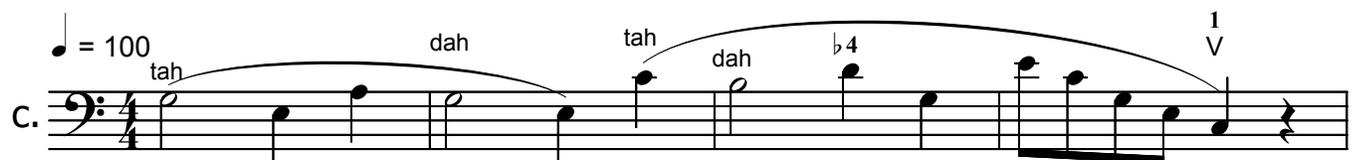
b. 

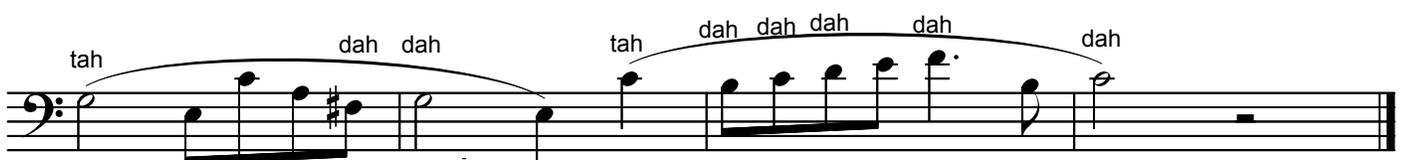


Yes, that D in 4th is a bit unusual but it offers the advantage of a natural slur to the following B.



Here are two short excerpts from the famous Bordogni vocalises. Lots of opportunities for natural slurs.

c. 



d. 



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

### #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 one flat. 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 groups of 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 one flat. The top staff features a series of eighth notes with triplet markings (3) above them. The bottom staff features a series of dotted eighth-sixteenth notes with triplet markings (3) below them. The two parts are designed to be played together to ensure rhythmic accuracy.

#### Etude

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

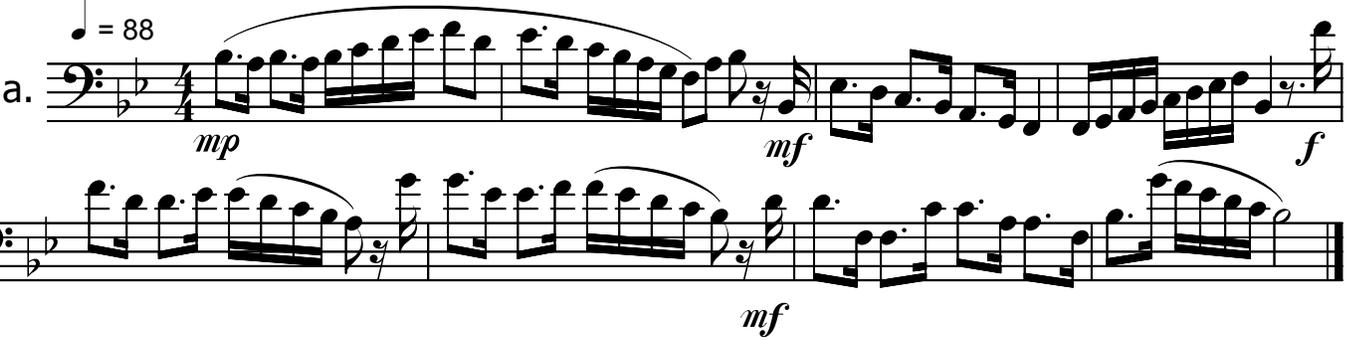
♩ = 104

Four staves of music in bass clef, 4/4 time, with a key signature of one flat. 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. 

b. 

c. 

d. 

e. 

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.  $\text{♩} = 152$

See also: Bleger 31 Studies #12; Hering 40 Progressive Etudes #28 #36; Voxman Selected Studies, p.22

### #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 first measure. The second staff continues with *f*, *mf*, and *mp* dynamics. The third staff features *p*, *mp*, and *f* dynamics. The fourth staff concludes with a crescendo (*cresc.*), *mf*, and *ff* dynamics. There are also fingering markings for 6 and  $\flat\flat 3$  in the first and second staves.

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. The second staff continues with *f*, *mf*, and *mp* dynamics. The third staff features *p*, *mp*, and *f* dynamics. The fourth staff concludes with a crescendo (*cresc.*), *mf*, and *ff* dynamics. There is a fingering marking of 6 in the third staff.

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.

b.

### 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.

Use a metronome!

♩ = 88

### #2.14 Memorize This: Melodic Minor

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

a.  $\text{♩} = 72$

**Tenor clef**

#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*

*f* *sfz*

b.

*mp*

*mf*

*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 5 6 3 3 3 5 6 3 3 3 5 3 5 5 5 6 6 6 3 3 3 3 3 5 5 5 6

### Etude

$\text{♩} = \text{c.60}$

*mp* 5 6 3 5 *mf*

*mf* 5 5 3 3 3 3 *f*

*mf* 5 6 3 3 3 3



**#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.

#3.21 Three Short Pieces with Diminished 7th Chords

a.  $\text{♩} = 63$

*mp* *ff* *accel.* *rit.* *p* *pp*

b.  $\text{♩} = 120$   $\flat 4 \sharp 4$

*mf* *pp* *cresc.* *crescendo* *f* *ff* *mp* *ff*

c. Adagio (rubato)

*mp* *mf* *ff* *mp* *f sub.p*

## 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.  $\text{♩} = 88$

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.  $\text{♩} = 88$

## 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

b<sup>4</sup>

a.

Musical notation for exercise 'a' in bass clef, 4/4 time, key of Bb. It consists of four staves of music. The first staff starts with a treble clef and a 4/4 time signature, followed by a bass clef. The music features a series of eighth-note pairs with a slide indicated by a 'y' symbol. The second staff continues the pattern. The third staff includes a 'y' symbol above a note. The fourth staff ends with a double bar line.

b.

Musical notation for exercise 'b' in bass clef, 4/4 time, key of Bb. It consists of four staves of music. The first staff starts with a treble clef and a 4/4 time signature, followed by a bass clef. The music features a series of eighth-note pairs with a slide indicated by a 'y' symbol. The second staff continues the pattern. The third staff includes a 'y' symbol above a note. The fourth staff includes a '#4' and 'b4' above notes, and ends with a double bar line.

### 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

1. F

2. G

Detailed description of the musical notation: The image shows two exercises, 1. F and 2. G, each consisting of six staves of music in bass clef, 4/4 time. Exercise 1. F is in F major (one flat). The notation includes various fingering numbers (6, 1, b4) and breath marks (V) placed above or below notes to indicate phrasing and technique. Exercise 2. G is in G major (one sharp). Similar fingering and breath marks are used throughout the six staves.

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 4.6: Varied Arpeggio Patterns

"Chord Sequence"

a.

Two staves of musical notation in bass clef, 6/8 time signature. The first staff contains two measures of eighth-note arpeggios for G-flat major (F, A-flat, C, G-flat). The second staff continues the pattern and ends with a whole note G-flat.

Play first in G-flat, then G

Two staves of musical notation in bass clef, 6/8 time signature. The first staff contains two measures of eighth-note arpeggios for G major (G, B, D, F). The second staff continues the pattern and ends with a whole note G.

Two staves of musical notation in bass clef, 6/8 time signature. The first staff contains two measures of eighth-note arpeggios for A-flat major (G, B-flat, D, F). The second staff continues the pattern and ends with a whole note A-flat.

Two staves of musical notation in bass clef, 6/8 time signature. The first staff contains two measures of eighth-note arpeggios for A major (A, C, E, G). The second staff continues the pattern and ends with a whole note A.

Two staves of musical notation in bass clef, 3/8 time signature. The first staff contains two measures of eighth-note arpeggios for B-flat major (B-flat, D, F, A). The second staff continues the pattern and ends with a whole note B-flat.

Two staves of musical notation in bass clef, 3/8 time signature. The first staff contains two measures of eighth-note arpeggios for B major (B, D, F#, A). The second staff continues the pattern and ends with a whole note B.

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 musical 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 a sequence of eighth and sixteenth notes with various intervals. The following staves continue this melodic line, showing intervals such as thirds, fourths, and fifths. The piece concludes with a final cadence 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.

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

b.

c.

d.

## 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.

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

a.

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)