Monday, July 13 3-6 pm

Players:
- Darrell Cassidy - Horn (Calgary)
- Andy Brien - Tuba
- Matthew Anderson - Bass, Tuba
- Paul Bower - Bass, Tuba
- Larry Issacs - TRB
- Pauline Bergen - Tuba
- Sally Nelson - Trumpet

Discussion: Why a bass TRB? Tuba w/large ensemble should play all, but simply emphasize bass end of horn.

Teaching Concepts:
- Music as an art form
- Dealing w/person - not the horn
- Brass - 'head' blood needs physical differences
- Brass vs. Keyboard
- Resonance built in nothing else
- Horn can't resonate between partials
- Brass - must hear pitches in head - recall
- musical concepts

Vibration must come from lips
- Lips = Vocal cords
- Different from woodwinds
- Brass must think as singer
- conceive sounds - recall old concepts
Horn must respond to a frequency & amplify it. A piece works w/ player, not the horn & mirror of thoughts. Don’t need great consciousness of how to do it. Think of sound & result. Play down mechanical end of it. Must train brain, listen to notes, concentrate them. Child—surprised, unusual. Adult—ability to search & gather info. Series of senses to brain, ears, etc.

Imparting knowledge—motor systems > not the learning—sensory systems > same. In playing: Imparting = playing. Learning = listening.

Issues: Statements; same part of brain as questions. Computer area of brain controls finger groups, subconscious. Must think positive thoughts—not a worried brain.
Tissues respond to thoughts.

Self-Analysis does not work in order products. The brain will handle it at computer level.

Human machine - very complex.
Computer level of brain makes it simple.
Simple set of controls for very complex machinery.

Human Body - don't analyze. Just order products.

Brain = huge. People have trouble playing.
Brain concepts is getting of product.
Think of end, not means.

7th Spinal Nerve (Motor Nerve) < 10th Spinal Nerve (Sensory Nerve) = both are 1-way Nerves.

Playing = Positive Statements.

Aj Teaching - how to think in art form.

Embodiment: Brain signals Lips.
Lips = Vocal cords.

How it sounds, not how it feels.

Don't correct wrong, only think about what is right.
Tuba = \lambda \ \frac{1}{T} \ \text{length}
T_p = \text{pressure}

By Breathing: Considerable expansion w/lots of air in the lungs

Low notes take a large, continuous flow
Tuba flow rates: 
- high pp = 10 liters per minute
- low ff = 140 liters per minute

Art Form: must play in public
Audition = pressure of tension + nervousness

Nervous = must narrow down to conceptual thoughts
College = very important for brass player
Embouchure: can't be taught mechanically.
In order to order response, you must order note
"The Bear" — by memory
  on horn, then on mouthpiece
Can't miss note if you send in correct frequency
  - must hear note first

Andy Brian
24 yrs. old
12 yrs. tuba
Washington<-(NV)<-(UI of Ind.)
Probation 5th Excerpts (Book)
Vaughn Wms. Tuba Concerto Excerpts
Unidentified Short Excerpt
Artist creates structure phrases (interprets) (tells)
Audience hears phrase

Q. Should ideal breath be silent?
A. Should sound like wind, not fricatives.
   Inhilation based on suction, not expansion.
   Boyle's Law -- reduced pressures.
   Must not work body to achieve breath.
   Must use suction to get gas in mouth.
   (Work w/ GAUSES) (Work w/ BAGS).

Vital capacity = 40-45% of Lung Capacity.
Average Person Can't Blow More than 3 lbr. of Air Pressure.

1 - 2 - 3 lbr. -- Tuba > intra-oral pressure.
1 - 2 - 3 lbr. -- Tp+ = intra-oral pressure.

Q. Don Jacob's breathing method? -- Not above a certain point? Lower breathing only?
A. Don't Agree.
   Tp+. -- low Zero 4 hi pressure.
   Jacob = 5 liter capacity.
   No removes part of potential.
   Should not remove upper lobes of lungs.
   Should use full potential.

[A1] Must use follow-through on inhalation, just as in sports.
Have series of segmented bellows for respiration — nature provides.
Nature provides — can move 1/2 liter of air regardless of position of body.
Standing posture — greatest lung volumes (nature = survival).

Respiration — need weakness, not strength.
Must not fight yourself.

Body strength > NOT Equal
Breath strength.

Diaphragm moves down to lengthen lungs.
Ribs up > inhalation.
Diaphragm down > exhalation.

Psychology of breathing — sucking air in from room to lungs.

Matthew Anderson
Libertyville, IL
27 yrs. old
Studies w/ Klenhammer
Jazz player
Tuba / Etude...

In our art form, we must be versatile and flexible.
Must tell story
Elements of Freedom & Interpretation

Brass papers must have great, extended range
- must play in all registers
- not only bass "trb".
- development of brain & tissues (embouchure)

Marcello Sannazzo Mvt.

Ages 18-20 - Max. Lung Capacity
- downward curve after that - after Age 20
  Elasticity
  Capacity

About 45-50 yrs. old, loss becomes significant

Much better to have too much - not too little air - - Esp, as you get older

Take air in - less than atmospheric pressure
Blow it out - more ""

When you sit, you should "stand" from hips on up
- Leave curve in lumbar arch

When you alter vertical position, you alter
rotation of ribs for inhalation
Be "tall" when you sit

Large Breaths = Max. Suction

Large Quantity / Decreasing Strength

* I match Breaths - NO Sequential Breathing
- I smooth (mut., only)
Simple thoughts initiate physical response - gets too complex when you analyse
Key = Quantity, not velocity; in breathing
Must mentalize while playing - message to lip control panel in brain to overcome player piano roll idea nervousness
Stimuli conditioned reflex idea - motivation as an artist "lie" to audience - to forget nerves or discomfort - corrects the problem; by using musical ideas - not technical

Imitation > Important Learning Tool
Creative Thinking
Adjust Embouchure by music - not muscles - feedback interviews - Product (sound), not mechanics (bent)
Must hear excellence & try to imitate it - Go for the product - Simplifying process

Reflex response to stimulus - motivations based on end product
Learn to control muscles, by learning the music (end product)
Let your brain handle the complexities
Go for outcome, not each ingredient; Simplify
Q. Is it bad to develop muscles? Bad for your playing?
A. No - bellows = respiration
    combat = athletics
    childbirth = defecation
    bellows system for brass playing
    Not combat strength uses
    Diaphragm used 24 hrs. a day all your life
    Various uses
    Strength = muscular uses
    Weakness = bellows

Minimal Movers - as skills develop, brain eliminates
extraneous moves
- only essential moves remain
- crudities left out

Q. Where does Bud stop level player - get his motivation, stimulation?
A. He loves music - concentrates on playing concepts. Very intelligent; how to sound,
   not how to do. Inspires others. Concentrates
   provides stimulus in brain for reflex response.

Q. No specific embouchure? Bad habits? Poor sound?
A. Never correct bad habits - but learn how good habits. Don't fight old habits - form new habits. Can't correct old habit - must change motivations. Strengthens permits change. Don't analyse, correct, or fight - simply institute new ideas.
Activate Imagination of Song
- less emphasis on mechanical aspects

Always develop music by sections
- repetitions on sections
- don’t just “run-thru” top to bottom of piece
- seek out easy & familiar passages
- work less hard on
- pick out difficult passages
- repetitions
- ear training & recognition (Solfège)
- improvements must take place in brain

Accumulation of lactic acid in muscle = fatigue
- playing can then break down
- stop & rest — don’t abuse lips
- stop so as to not cause damage

Must correct ends of phrases
- be comfortable; take a breath
- breathe before you get into an emergency state

Haydn #1 Concerto (Horn)

Shortness — how much vibration in lip

Vowel = sound
Consound — tongue used to stop/start sound

Tongue = articulation
- must not exert pressure
- must not get in way of sound
- must not push for closure
Must motivate vowel, not consonant
- use consonants as in speech
- minimal contact
- pure diction, as in language

\[
\begin{align*}
AH & \rightarrow \text{ sim tongue positions (vowel form)} \\
OH & \rightarrow \text{ sim tongue positions} \\
3 & \rightarrow \text{ ig. tongue positions} \\
A & \rightarrow \text{ eh}
\end{align*}
\]

Speech - Diction - Language
- best tool for work on tongue/articulation

\[
\begin{align*}
\text{Lips} & \rightarrow \text{ air} \rightarrow \text{ noise} \\
\text{high velocity} & \rightarrow \text{ low velocity} \\
\text{out air} & \rightarrow \text{ AIR thru PIPE}
\end{align*}
\]

Tongue can make "hiss" in fuel/air line to embouchure
- must keep relatively open
- don't hold tongue too high
- keep low vowels dominant

Increased volume of air - not pressure

A. Can permanent damage be done to lip by playing too much?
A. NO biuld up pressure & resistance a block func. of 11th cranial nerve
No permanent damage from playing.

Q. Mouthpiece practice?
A. Very valuable. Can cut out a lot of bad, old habits — by leaving horn out of it.
Mouthpiece alone removes acoustical laws of instrument — permits change & introduces strangeness. Connects tissue in response to thought.

Objections? — Altered Acoustics

Lips — large circular fibers of many small groups of fibers
Must use modi mouthpiece pressure to isolate fiber groups
—to focus buzz of lips is necessary
—isolates region of vibration
Yes — use mouthpiece for beginners also
—to start pattern

Q. Views on long tones for warm-up?
A. Long Tones good when needed. Must balance musical diet. Long Tones & Intervals very important.
If you play a lot of long tones, then you don't need to practice on them.
If you play a lot of marches, calls, etc., then you do need long tones.
Long tones give stability — but not a fine, flexible embouchure?
Wednesday, July 15  3-6 pm

Paul King Instrument (detachable bell) (Texas)
(Bass Trom.) Start on daily warm-up procedure
- slurs/glissandos - on various partials
- intervals
- Harry James excerpt

Can move pitch up & down on brasses
- loses quality/resonance/dynamic range
- can extend range in this manner
- tipping up or down
- a practical tool but must be used sparingly
- loss of tone quality

Must get largest output in sound for input of effort into horn.

Vibrato = Pitch averaging & Output fluctuating Therapeutic Tool

Prepared Solo Piece

Nerves influence phrase lengths on brasses
- tension reduces breaths
- must prepare in advance for this by allowing extra air - protect ends of phrases
- for auditions or recitals

End of breath = increased body tensions
- less comfort w/diaphragm
- avoid running "on empty" lungs
- creates many problems
Must adjust volume levels without altering quality of tone

High notes = fast vibration \^ minimal differences in strength
Low " = slow "

Embouchure must reach certain position/shape to vibrate certain frequencies
- NEVER stabilize an embouchure
- must make large changes over various ranges on horn
- free approach to musculature
- stabilize sound/tone/product/end result
- NOT embouchure

Length, Thickness, Tension \& All Change Dramatically with different tessituras

Age 24 - 6' tall - basically healthy (Paul)
Shallow Breather - Big Tongue - Big Tonsils
- esp. in high register

After Age 25 - Lung Capacity Decreases
- Many, players (hours) quit at age 40 or 45 because of this

Problem is NOT over-breathing
\[ \text{Problem is NOT Over-breathing} \]

Sperometer Curve = (normal)
\[ \rightarrow 80\% \text{ of air in 1 second} \]
\[ \rightarrow 3-4 \text{ seconds for the rest} \]
\[ \rightarrow \text{residual air not usable} \]
Astatic Curve: \[ \frac{\text{air}}{\text{air slows}} \]

Relaxation Pressure Curve: \[ -3/4 \text{ lb.
} + \text{ electricity (ease of blowing) cesser point (reversal))}
\]

Pressure against larynx feels like "too much air" --- a fallacy

Stay out of negative pressure curve by filling up with air in advance
- avoid tension in body
- avoid 1/2-empty lungs

Standing up: biggest lung cap,
Lying down: smallest lung cap,
\[ \Rightarrow \text{So - Sit Tall} \] when playing

Embouchure Segments: causes "Rasie" in Tone
- can be caused by tongue in way
- " " " " thin air column
- " " " " crowding air passage
- speech therapy will fix

Shaping of tongue: SM = "key"
LB = "hoh"

feel change in tongue

SSS = pressure changes in position & shape & size of tongue
Use of diction to correct airway melodies
- NOT embouchure
- retrain production of vowels & consonants
- to increase airway opening
- shaping aspect of tongue
- bring positions into consciousness
  - closed & open shapes

All new stuff involve crudity at first
  - development by repetition - refinement occurs

Learn by imitation & intuition
  - don't worry about what tissues are doing
  - go, instead, to control panel in brain

Sally Nelson (Techpet)

Oregon Symphony -- 5'4'' tall -- 3½ liters

Etude Warm Up (chiaro) (plays Bach Tpt.)

Sml. Lungs = Short Bow -> must change more often
  - work with max. air amt. for greatest ease

high range -- add 1° work effort involved

Bad Sound = Bad Embouchure
  Good " = Good "

Don't prepare chops. Prepare sound. Brain orders tissues
Keep art form dominant over physical factors of playing horn
Study music—not muscles—psychomotor activity

Pauline Shiny & Yamaha Tuba
Boopkins (Tuba) Normal IL Studies at U of M
Romanza—Vaughn Williams (Kodaly)/+ (Nervous)

how to overcome nerves — Self-focus (mental focus)
—when coordination goes, must conceive sounds mentally
—when uncomfortable, must “lie” to audience
—worry & brain analyses all incoming info
—when nervous—leave all awarenesses behind
—tell a story
—Tell MELODY (song) not MALADY (chops)

Broca’s area of brain involved in tuba playing
—must not ask questions—uses same area of brain
—must issue statements
—NOT meta, but brain

Ignore mistakes—instead, focus on what you’re now doing
—don’t worry about “what just happened”
—think ahead—think about music & melody
Booboo = Clinker = Clam
—result of not hearing pitch in advance
Imitation - powerful tool - Must Program Brain

"Attack" - a misnomer - we don't "attack" a note, we start a note by starting vibration - motivation is sound or beginning, NOT attack

Bad notes can be made into good ones - silence can't - must start somewhere

Must develop mental focus - Imitation - ignore difficulties, nerves, etc.

Sense of message - must have story to tell to audience - thoughts in motor system to influence external environment - NOT sensors to pick up info - must have MENTAL FOCUS - imagination - recall - intuition

- No Analysis & No Components
- Go to brain to order a message

Vaughn Williams Concerto - 1st Mut.

Always go for finest quality, finest presentation

Rattling - caused by embouchure segmentating (relax) - chops vibrating at different rates - too small opening & too thin air column
Must play with thick column of air
- use vowel Oh or Ah
- tongue small d down
- to avoid rattling & segmentation
- get tongue out of way

Use thick, quantitative air at all times
- "large bore fuel line" air column

Change lips — NOT air column
- high register = oboe reed
- low register = contrabassoon reed

1st note (after silence) has to be your best
- most important of all

Develop brain, not lips
- lips develop with music
- work only based on musical thoughts
- not mechanics

Q. Segmentation — causes?
A. Embouchure set for too high a note
   - Vibrating surfaces relax too much
   - Chops not set for right frequency
   - Subliminal causes
   - Protracted — Lower
   - Retracted — Higher

All pitches in music change in some way
- don't stabilize pitch sources
- stabilize product
Q: Syllables for multiple tonguing?
A: TA-TA-KA TA
Conceive syllables, as in language
Low vowel form - to get tongue out of way
of embouchure
- never starve embouchure

Q: Shallow mouthpieces for beginners? for high notes?
A: NO. Should have thorough grounding in
mid-range for start. Develop musicianship
in comfortable range. Might try narrow
rim, rather than shallow cup. Try a
normal cup - averaging process. Think of
sound - not shape of lip. Any mouthpiece
has potential of range.

Q: Braces on brass players?
A: If sharp protuberances - cause alot of pain.
Smother ones not so bad. Avoid high
range - go to mid or low range -- or to a
larger mouthpiece - or a lower instrument.
A bad handicap. Some bad pathological
problems can develop - Cool it! Be careful
not too cause pain or damage lip. Use
of beeswax or cigarette paper possible. If
a flat band - ok. If protuberances - be very
careful.
Q: Range of mouthpiece vs. Range of Trumpet?


Q: “Diaphragm” Vibrato?

A: Vibrato comes from many sources—concept of sound. Fluctuating column of air—NOT a fluctuating diaphragm. Think of sound of vibrato, NOT method. Diaphragm = motor nerves, not sensory nerves. Abdominal wall moves in a “diaphragm vibrato,” as do many other parts of your anatomy. Start with sound of vibrato. Use oscilloscope (multiple series) to see variations. Use Conn strobe to see dynamic pitch changes. See + hear vibrato. (1) Sound fluctuation of air column—Lip—Jaw—“Diaphragm.”

Must have concept of what vibrato sounds like. Never isolate anatomy to produce vibrato—has many sources. Should be able to turn vibrato on & off at will—should be conscious of it.
Friday, July 17  3-6 pm

Q. Recommend perf. for students if on a diff. instr.?

A. Yes - Tremendous crossover style, phrase, etc. Or, may sing - to get musical points across. Student should get concept of sound & phrase... not methodology of how to perform.

Scott Sorensen (BASS TBB)
Age 25  6'2" healthy
Warm-Ups
No need for set warm-up procedure
Warm-Up = Practice
Brass Warm-Up is not the same as an athletic Warm-Up
- no need to warm up muscles
- increased elasticity, etc.
- Lip supply (level) of blood: good 24 hrs. a day
Start each day with lyricism & inspiration
- no "push-up & sit-up" regimen
- Constant excellence & competition
- Form concepts
- Imitate
- Improve upon
Playing = contraction states of selected muscles
Make each note your very best
- enter into competition with the finest artists
- copy & imitate artists' form concepts
- form your finest quality of sound
Dramatic & Lyric Sounds = Same fine qualities

Lyricism = Always your basic sound
- best sound
- most sound, with least effort
Dramaticism = takes more effort

Hungarian March (Ragtime)
- nervousness = tightness in throat
- take big, deep, slow breaths, to relax
- must hear each individual note
- good quality
- good quality on each & every note

Long tone = Long loaf of bread with same fine qualities - chew-out
Short notes = small slices off loaf
- each have same fine quality

Answers lie in brain, not in memory (memory)
- must hear & imitate sounds
- don't think of "how to do it"
- conceive & imitate sounds

Brain = Player Piano Roll
Issue = Piano Keyboard > Various relationships

Dominance on Quality of Music Played
- NOT methodology
Always an awareness of communicating
- psychomotor activity
- not sensory phenomena
- "paralysis by analysis"

Playing = motor systems
Listening = sensory systems
- Can't do both at same time
- Control products, not methods
Reflex response to stimuli
- provide stimulus (only)
- don't involve yourself in muscle anatomy
- control panel in brain will control muscles in response to stimulus
Tongue can close off column of air
- starves embouchure
- makes "kink in fuel line" touches teeth
- epiglottis or tonsils can also do it
Low register needs quantity of air
- not power
- not pressure
Breathing - blow straw to increase air supply
Yawn & relaxation pressure
Inhalation - Section
- don't substitute mechanical muscle changes for the real thing - inhaling
- body can lie
Mouthpiece playing - matching pitches
- removes powerful source of stimulus for bad habits (horn)
- pick out hard spots & do on mouthpiece only

Larry Tuba Mirim (Mirim), 1st Tuba - Canada

Nervousness approx = to fright
- goes into his term (extreme)
  - rapid, shallow breathing \(\rightarrow\) hyperventilation
  - counter by deep breaths, slowly - hyperventilation
  - minimal effort
  - keep tension to minimum
  - sit tall
  - largest air potential
Quantitative breathing
Deliberate Relaxation \rightarrow Rapid Pulse
Nerves = Danger = SaberTooth Tiger Syndrome
Don't ask questions \rightarrow Can't do both simultaneously
Issue Statements

Martin: "Beade for Trb."
-sounds like 18/12
add buzzing to tones using "H" Consonants
- "ha-ha-ha"

Reduction Phenomenon in Abdomen = Support
- \textit{not} muscle activity
- wind on each note
- \textit{not} just tongue
- \textit{can't} do "ha-ha-ha" attached with shallow air
- \textit{can't} do if forcing air out of lungs
- must have adequate supply of air in lungs
- don't go into negative curves

"Bolero"
- hear pitch before you start

Q. Straw breathing?
A. Changes motivations. Alters program. Eliminates friction - working with air. Air can't be felt below larynx - only in mouth.
To feel mutes of air - not air apparatus, such as expansions & contractions. "Breathing to Expand" not "Expanding to Breathe"
Q. Rattling in notes?

A. Problem is segmentation of lip-sections of lip vibrating in various patterns. Relaxation of small fiber groups. Usually embouchure is set for too high a note, a reduction of airway...too small a column of air. Embouchure = a mass of small fiber groups = Circumoral Oris. Small mouthpiece pressure used to shape action of small muscle groups in lips. Isolation of selected areas of chops in bone by mouthpiece. Embouchure under control of brain based on thoughts of pitch. Embouchure varies according to pitch - stabilize tone, not embouchure. Embouchure T.I.M., not relaxed.

Q. Applications of AJ teaching to woodwinds?

A. Certain principles of breath apply. Many woodwind players use lots of pressure & very little air-bodies in contraction states. Using athletic muscles (non-respiratory) for respiratory purposes→always causes problems. Must use bellows system—not great strength. Pressure causes various closures & stabilizations; can't exhale or tongue very well. Must use large air motions. Hyperventilation can be forestalled by a few extra inhalation/exhalation procedures: purposely hyperventilate, Sing a lot for woodwind players—to demonstrate. Imulation is a very powerful tool. Reeds replace lips.
Q. How much pressure is used in playing?
A. Sufficient to get product. Ease breeds success — excess gets in the way — Some as in athletic skills, "Minimal Motors" in physiology, prudities disappear with increasing skill so they don't interfere. Simplify rather than making more complex. No massive contractions required to play instrument.

Q. Clinical Bellows — for training?
A. It is of value — but can't always regulate flow rates.

Q. How to train for tonal memory?
A. Learn to hear in silence — practice recall, hit note on piano — wait — then try to sing note as remembered. Memorization of sound. Brasses need good relative pitch, solfège is a big help, very valuable. Recognition of pitch is training turns the brain — symbols turn to sounds.

Q. Recommend any S.S. or eartrain tests?
A. Solfège most important — more so than melodic, rhythmic, or chordal dictation. Need recognition of sound & tone. Need pitch recognition. No such thing as "tone-deaf." Can be trained to recognize patterns. Can develop good relative pitch. Start simple & advance as called for.
Q. Recommend mouthpiece rings?
A. Not always—presents a tough challenge. It is much harder to play than on horn... most not transfer add'l. work effort back to horn. Can't feel lip vibrating on ring...but not on horn.

Paul Repeat Perf. (Rattle in Tune)
Bauer (bass tub.) Can't rattle today. Problem corrected?
In a condition of transit in horn.

Q. In a slurr, is there a break in airstream?
A. Try to keep continuous flow. Ascending slurs may need to be modified. Descending slurs can keep nearly continuous from valves make semi crescent, not serious...Still nearly continuous.

Q. Why always use music instead of drills, to correct problems?
A. Must always think in musical terms—must train brain as a storyteller, no push-ups or sit-ups.
Mediocrity = sounds without motivation.
40% drill form > practice times
60% art form

Q. Can you increase vital capacity?
A. Only up to what nature gives you. Can learn to use up to full capacity. Use medical bag to motivate breathing larger quantities.
Saturday, July 18

Mike Pendowski
(SAX)

Jazz Sax Player
Warm Ups (scale patterns)
Jazz Excerpt (solo) - Improvised
Age, 23
Played 12 years
Also plays Ft, Ct, Bsn, Tpt, Trb
Has trouble playing long phrases
- wants to go 12 bars
- needs to take in more air when playing
- must not immobilize lower abdomen
- must not use only "diaphragmatic" breath
- must not have innervated, contracted abdomen
- increase of internal pressure
- diaphragm holding down; closing off
- stiffness in upper respiratory tract
- antagonistic musculatures
Respiration based on vertical breathing
- great expansion potential

Pauline Repeat Performance - different today
BooGer
(Tuba)
Etude from Normal, IL
Age, 18
Played 5 years
5'9" or 5'10"
Large lungs
Etude on Tuba, then on mouthpiece rings,
then on Tuba again
Song > stimulus for wind brass players
Don't control tissue - think of sound & tone
Reduce playing to simplicity of sound
- not complexity of body functions

Air = Velocity
Loud = Fast
Soft = Slow  ≠ a pressure phenomenon
Song = 85% - 90% of playing music (sound)

Q. Ring work kept within 2 octaves?
A. Ring work direct = much more effort involved = less resistance. Don't want to transfer extra work effort back to horn. So, keep in small range — minimizes difficulties for embouchure. Don't carry resistance & back pressures back with you to horn — only carry buzz back.

Sara Taking course for credit. 5'8" - 5'9"
(Soprano) Bonas Etude for Exercise. Book
- Solfege method book
Played 15 - 10 years
Springfield, Ohio

Good to be a little nervous
-too much no good
Blocking too much in internal cavity
-think of singing on "Oh" vowel
-don't think of tongue
-think of Beverly Sills sound
About a 4 liter lung capacity

Friction in Pharynx

Need to open throat more
- no more friction in throat

More use of breath as wind
- not merely an adequate supply
- need to have excess in "reserves"

Need freedom of moving air
- think "frog a tip" motion

Suction in inhalation
- biological framework
- Boyle's Law
- mechanical principals

Air - fuel supply

Q: Easy to use your principals in slow melodies, but not in fast technical work. Why?
A: New habits must form in slow playing. Can't play faster than you can think. Must know music - would work in fast music if it was memorized - if known very well.

Acquiring info - question.
Imparting info - telling a story.

Q: Student developed M.S. Still to play?
A: Depends on which muscles are affected.
Q. When I take 2 consecutive big breaths, I have trouble relaxing, why?
A. Must do away from music at first. Stage as crudely. Take slow, quantitative breaths. Do exercise without instrument. Break into slowly.

Exercise 2. Elevate Rib Cage
   - Raise hands over head & stretch
   - Fill lungs to count of 5
   - Slowly breathe in
   - Drop arms when lungs full
   - Exhale slowly to count of 5

   May Gradually reduce to count of 3
   Must use diaphragm for these large breaths
Sm. breaths use only ribs
Then reduce to count of 1
   - Fast inflation

   "Fast replacement of air - a problem
   - Velocity is not primary factor
   - Think of quantity instead
   - Order a large breath
   - not a fast one

Exercise 3. Divide breath into 3 parts (think breath, not body)
   - NOT sequential breathing
   - Divide quantity into 3 parts
   - Then period of silence
   - Judge what you feel like
   - Expansion vs. air quantity

Let out air in 3 parts
Wait a moment between each "part" of air
Repeat the procedure
(2) 5/4 time
- exhale on beats 1-2-3-4 (slow)
- inhale on beat 5 (fast)
- won’t hyperventilate

Then 4/4 time
- exhale 3/2 beats
- inhale 1/2 beat

"Snatched" inhalation
"Phlegm - Thru" is very important
Must not blow from diaphragm
- diaphragm can only go from low to high
- can only lower air pressure
- can not raise air pressure
Take air as suction with minimal friction
- not smoothly

Female vs Male Diaphragms: Different Function Potentials
Male = 20% more lung capacity
Females must get used to taking in large volumes of air
Don’t confuse expansion with breath
- All breath has expansion
- But not all expansion has breath

(2) Taking Course for credit

Short Orch. Excerpt
- palatine while playing
Diaphragm not descending
Upper Rib Cage good
Q. Should all teachers palpate abdomens?
A. No—not without knowledge of structure and function. Must be aware of biology—or can do a lot of damage. Must also know psychology of function. Stick to blowing out matches, blowing open pages. Go for results, not machinery. Play use anesthesia bag to see if for air quantities. Don't go too much into structure—does too much for analysis.

Q. Scar tissue (guttae) in upper & lower lip—new tooth. Notice expansion in both lips after playing. Lip goes dead after 15 minutes. Hit lips with multiple chain saw = Accident! (taba player). What can be done?

A. Neurologically—lips is highly functional, although very damaged. Blood supply is very good to everyone's lips. Lips, very sturdy. Healing activity in upper lip—primary function is in lower lip. Should remove mustache—this causes unequal pressure, padding on mouthpiece. Tissue has recovered & regenerated. Must retrace your musical steps—go back to easy music, avoid extremes of fatigue. Lips are in good shape—but, don't abuse. Play alot on mouthpiece.

Q. Tightness in throat in high range. Why?
A. Due to lack of air coming up from trachea. Need large volumes in lungs.
Tightness due to Val Salvo maneuver.
Need more air in lungs & trachea.
Must not pressure your air.

Q. Breathing for grade school beginners?
A. Music is of 1st importance - sound, song, phrase.
   Concept of sound dominant. Breathing: simply have them yawn. Dealing with unburdened respiratory systems. Don't insist over long phrases - smaller, in a group. Take in alot of air. Emphasize sound, not air. Set good examples & encourage in group. Hear excellent. Priority is good sound.

Q. Tonguing - velocity: How can be sped up?
A. Tongue has potential of stiffness. Must develop lightness. Emphasize vowel, a play down consonants. Consonants = springs to bring tongue to point of closure. Vowels bring tongue down, out of way. Motivate vowels, not consonants. Everyone has a different type of tongue. Velocity comes in diction - practice with speech, then transfer to music. Muscles can lock tongue in place - a disaster. Don't contract tongue. Have a weak, but precise tongue. Strength in tongue - slowing down. Motivate sound.

Q. Mouthpiece Pressure?
A. Equal on all points - both lips. Mouthpiece must isolate all sin. fibers - both lips.
Q: Facial hair?
A: Mustache acts as cushion on rim—but does not isolate fibers. Better without for brass people—esp. tuba.

Q: Baritone & Tuba—both?
A: Good idea to learn both, like piccolo—tpt. & C tpt. Same relationship. Do both. Ranges must cross—full range on both. Try to use same rim for both: Same isolation.

Q: Air leaking thru nose when playing?
A: Nerve damage from tonsillectomy—soft palate not closing completely. Or—perhaps just a bad habit. Train to blow under pressure. Need to see if this is a medical problem—nerve damage. Sinus problems?

Q: Changing embouchure for low range? Pivoting?
A: Embouchures must be permitted to change. Never stabilize embouchure; only stabilize sound. Don't favor pivot system. Pivoting is sometimes over-maneuvering—too crude & large. Pivoting: don't fight it, but don't help it either.