



**negaunee
music
INSTITUTE**

at the Chicago Symphony Orchestra

Arnold Jacobs: Mentor, Teacher, Friend

Midwest Clinic, Friday, December 18th 12:00-1:00pm

Handouts enclosed for this panel discussion:

- *I Don't Care How You Sound, I Care How You Are Thinking*, by Rex Martin
- *All Sizes and Shapes Can Play the Tuba*, by Floyd Cooley
- *Pedagogical Concepts of Daniel Perantoni, Influenced by Arnold Jacobs*
- *Myths, Magic and Mentoring*, by David Fedderly
- *Special Studies for the Tuba* by Arnold Jacobs, compiled by Charles Schuchat with permission from Hal Leonard Corporation

Presented by the Negaunee Music Institute at the Chicago Symphony Orchestra

with leadership from CSO Principal Tubist Gene Pokorny and Beth Lodal

and

Daniel Perantoni

Jonathan Boen

Floyd Cooley

David Fedderly

Fritz Kaenzig

Rex Martin

Charles Schuchat

"Arnold Jacobs, Mentor, Teacher, and Friend"

Arnold Jacobs, tubist of the Chicago Symphony 1944-1988, was one of the most influential brass teachers of our time. This panel of well-known former Jacobs's students will share his influence on them both personally and professionally. To commemorate the 100th anniversary of Arnold Jacobs birth, they will discuss his practical methods that will benefit all music teachers and performers of any age.

Panel: Chair, **Daniel Perantoni**, Provost Professor of Tuba, Jacobs School of Music, Indiana University

Jonathan Boen, Principal Horn, Lyric Opera

David Fedderly, Retired Tuba, Baltimore Symphony, Professor, Peabody and Professor, Peabody and Univ. of Maryland

Floyd Cooley, Professor of Tuba, DePaul University

Fritz Kaenzig, Professor of Tuba, University of Michigan

Rex Martin, Professor of Tuba, Northwestern University

Charles Schuchat, Tuba Professor, Roosevelt University

Rex Martin, Professor of Tuba, Northwestern University

Discussion topics from the panel:

Jonathan Boen - "How one lesson changed the course of my career".

Floyd Cooley - "Sound to Song: How Arnold Jacobs Translated Complex Analysis into A Simple Musical Approach."

David Fedderly - "Sound under the bell to sound right to the audience; Articulation; Life lessons through music."

Fritz Kaenzig - "Song and wind, and how Arnold Jacobs used them in different ways"

Rex Martin - "I don't care how you sound. I care about how you are thinking!"

Dan Perantoni - "Arnold Jacobs, the thinker and the doer."

Charles Schuchat - "High Standards: Always expecting to play your absolute best."

"I don't care how you sound. I care about how you are thinking."

Arnold Jacobs (1915-1998) is still world-renowned as perhaps the greatest wind instrument pedagogue of all time. However, many people have the misperception that he was an "air guru." While he was an expert on respiration, he was even more an expert teacher, an expert at teaching music performance based on sound psychological concepts.

While studying in the early 1950s for medical school entrance exams, Arnold Jacobs learned so much about physical function that he began to share this information with his students. He soon found that the more he taught his students about how their bodies should function for performing on the tuba, the worse they got. This experience, which he later coined "paralysis by analysis," combined with conversations with Adolph Herseth, led him to begin a decades-long study into the psychology of performance – learning the connection between what a musician thinks about while performing and how well they play, leading him away from direct, conscious manipulation of the body.

The mental aspect of performing is easily and quickly taught. It might only take two minutes to teach the most important concept of all: what to think about while performing.

The art and craft of respiration, which needs to be practiced with excellence and great repetition over a period of six months to a year, is ultimately best left to the subconscious while performing. Teaching respiration is time intensive, sometimes leading a student to believe that the subject is worthy of much greater attention than the mental aspect of performing.

Development period

Performance, like many complex activities, is based on a series of highly refined physical maneuvers performed simultaneously. These activities are far too complicated and numerous to be handled by our conscious thoughts, so they are studied slowly and with great quality and repetition over time until they can be handled expertly by our subconscious. This development stage is essential and was taught by Arnold Jacobs by assigning numerous etudes, solos, drills and orchestra excerpts. His emphasis at this stage was on quality of tone and on excellence of all aspects of performance.

Performance practice

Once the development period had been suitably trained, (meaning the conditioned responses were in place) the mental emphasis would shift to the imagination. The conditioned response which had been practiced (developed) could now be performed by focusing on the stimulus which would cause the response. Arnold Jacobs referred to this as a "reflex response to stimuli." This could be likened to Pavlov's dog. We develop a conditioned response, then learn how to reliably perform the conditioned response by focusing on the stimulus which causes the conditioned response (which we have already practiced.)

In performance, the stimulus in the mind (which causes the conditioned response) can take several different forms, but the form emphasized by Arnold Jacobs was the imagining of the complete, finished version of the music by the student. This concept was elegantly simplified by Mr. Jacobs thusly:

"The student has two instruments: the real one in his hands, and another, much finer instrument which exists only in his head. The student should focus on playing the instrument in his head. The instrument in his hands will then be a mirror image of the instrument in his head."

With an advanced student, Mr. Jacobs would work immediately on having the student imagine the music in his head without performing on the instrument. Once this musical image was firmly in the imagination, the student would then be asked to perform that music on the instrument while continuing to use his mind in exactly the same way. The mental focus was on the music in the imagination, not on the instrument. As Arnold Jacobs succinctly put it: “It is better to listen to what you want to sound like than what you actually sound like.”

The information contained in this imaginary instrument is a sufficient model for the brain to then perform the instrument beautifully, based on the principal of conditioned responses. These conditioned responses were previously developed, focusing on the excellence of the results. The performance phase is merely a way of recalling that excellence.

In order to maintain the excellence of performance, two things must continue to be practiced:

1. The maintenance of all necessary techniques—the concept of “use it or lose it”
2. The continued focus on practicing the stimulus

Rex Martin, Professor of Tuba, Northwestern University

All sizes and shapes can play the tuba!

Large lungs and torsos are not a prerequisite for excellent tuba playing. Arnold Jacobs said “My lung capacity may be small so I just breathe more often.” He was the master of quick replacement breaths.

Here is an easy exercise to develop quick replacement breaths:

It is essential to breathe and blow from the lips to ensure open airways!
Take a full breath, blow out all air articulating the air with the tongue.

Tu tu tu tuuuuu breathe 4x

Tu tu tuuuuu breathe 4x

Tu tuuuuu breathe 4x

Tu breathe tu breathe tu breathe tu breathe

Each developing pattern accelerates until it is a rapid in and out motion.

Happy Rapid Breathing!

Floyd Cooley

Retired principal tuba, San Francisco Symphony

Professor of tuba and pedagogy, DePaul University

Pedagogical Concepts of Daniel Perantoni influenced by Arnold Jacobs

Too often, as teachers, we make this wonderful art of music too difficult. Often teachers stress only the physical side of performance such as having a picture perfect posture, embouchure, or other physical descriptions. Students often concentrate so much on the technical manipulations of their instruments that they become insensitive to the expressive feelings of the music. Our goal must always be on the end result, which is to make beautiful and musical sound.

Perhaps the most important physical aspect of tone production is the breath. It is the source of energy that causes our lips to vibrate or “buzz”. Correct breathing is, therefore, essential to good performance production and musical expression. The key factor to inhalation is to expand both the abdominal area and the rib cage naturally and simultaneously. The sternum (breast bone) must rise gradually along with an upward, as well as outward movement of the rib cage. At the same time, the abdominal muscles should be relaxing outward gradually, which increases the size of the lower section of the chest cavity. The abdominal muscle action and the rib cage action must be coordinated and balanced. This way the chest cavity is able to reach its greatest size with minimal waste of body energy. This will provide the most space for the lungs to expand to their maximum potential. The end result and our goal is to take the largest inhalation with the least mental and physical effort. So, simply take a deep breath naturally by initiating movement in all parts of the breathing apparatus simultaneously, again, the important work is expansion. Efficient breathing has to happen automatically. All we do is decide on a movement goal and let our subconscious part of the brain do the rest—the way our mind-body system was designed.

Think of sucking in air with the mouth shaped in the vowel “O”. Exhale with the same sound. Listen to the sound of the air during inhalation and exhalation. It should sound the same. A good way to develop better efficiency of your lung capacity is to practice inhaling and exhaling into a breathing bag (anesthesia bag, 5 or 6 liter.) Take a deep breath and then fill the bag to your capacity. Now, inhale the air from the bag. Exhale and fill the bag. Repeat several times. Exhalation of carbon dioxide into the bag will eliminate hyperventilation.

During exhalation your lower abdominal area will move inward. Your goal is to blow through and beyond your mouthpiece. Rule: You can use up to three-quarters of your lung capacity without having to squeeze to get the remainder of the air out. Never play in the last one-quarter area. Otherwise tension in the body will cause a thin, tight, restricted tone.

Since the tuba is the largest of the brass instruments and is played in the lower register, a greater volume of air is used under less air pressure. The tubist cannot be expected to play long phrases like a person playing a trumpet for example. Tubists simply have to breathe more often. Therefore, learn to breathe quickly and sub-phrase longer phrases.

Another consideration must be given to the size (lung capacity) of the performer. A junior high student, for example, will have smaller lungs than an adult. Yet in many cases the teacher will demand the performer to attempt impossible phrases. The result will be tension causing unacceptable tone. In sections where there is more than one player on a part, breathing should be staggered. Each player or a group of players will breathe in a different place, yet concentrating on the desired phrase.

When you form a tuba embouchure, think of saying the word “Tuba”. The “tu” (two) is a good example for basic formation. The important consideration here is forming firm corners of the lips. Next, form a slight pucker as you about to say a word beginning with the letter “p”. Another good example for good embouchure formation is saying “pew”.

Good general mouthpiece placement for the tubist is 50% top lip, 50% bottom. Another helpful thought is that the top lip is mainly responsible for sound and the bottom lip for interval. Avoid excessive pressure on the top lip. You need just enough to form a seal. Think of blowing directly through the center of the mouthpiece. With proper inhalation, release a steady stream of air with a formed embouchure to produce a sound. Remember to think "OH".

The tongue is used to aid in articulating the start of the note much the same way as singing. Imagine that the only difference is that the vocal chords in playing the tuba are now the embouchure. The tongue will move up and down - not in and out. The tongue is secondary to the breath. For the best tone make a sound without the use of the tongue. The tongue itself does not produce tone. It aids pronunciation. Concentrate on blowing from the lips. A good attack is produced by simultaneously blowing while the tip of the tongue strikes the upper lip below the teeth while having a formed embouchure. You will get a more efficient buzz and sound than tonguing behind the upper teeth. More air will get through the lips. The concept of tonguing behind the upper teeth may work best for high brass instruments but this can result in causing the tongue to be too high in the mouth for the tuba causing a nasal sound. We have a much bigger mouthpiece than the trumpet and play in the lower register. A good attack will consist of the breathing apparatus, the embouchure, the oral cavity, and the tongue all in correct timing. To stop a note, simply stop the air. Think of an "h" ending - "toeh".

Perhaps the most misunderstood concept of articulation occurs during faster articulation. The faster you play, the more connected notes become. The shortest notes having the most space between them are the eighth notes. "Toeh-toeh-toeh-toeh". The sixteenth notes are more connected. Also your basic attack is somewhat softer: "toeh-doe-doe-doe" For faster playing we would use a double tongue: "toe-ko-doe-ko"; faster double tonguing becomes "doe-go-doe-go".

The legato tongue is used to assist longer notes for clearer articulation. The only separation between the notes will be the soft "d" as in the word doe.

Slurring is a technique essential to the success of all tubists. The first note of a slur is articulated. The slurred notes are done by the embouchure without the use of the tongue. It is essential to keep a steady stream of air going to keep the lips vibrating during the slur. Think of changing the intervals of a slur at the last possible second in correct time with minimum amount of movement. Concentrate on the music rather than feeling the embouchure change on each note.

Successful performance demands the development of good, physical habits that will happen naturally, like the simple task of picking up a pencil. Be concerned with the "doer". One can only play as well as he or she hears. Listen to master performers on all instruments. Imitation is still the best teacher. It is helpful to develop your ear through singing. This will strengthen a closer awareness of pitch, melodic line and expression. Sing everything in your mind while playing the tuba. Finally, put it all together (air flow, embouchure, tonguing, etc.) into one concentration, which is the making of music!

Myths, Magic and Mentoring

It was my great fortune to have been able to study with Mr. Arnold Jacobs on a weekly basis from 1972 – 1982. Even after that, there were periodic lessons and many phone calls.

One of the lessons Arnold Jacobs used to teach is how small the music business really is. I was at Bemidji Music Camp where I met David McCormick, who happens to be a long-time board member of the Midwest Band and Orchestra Clinic. Many people had told me I needed to go study with Arnold Jacobs but David actually connected me with John Paynter and Fred Hemke. Once at Northwestern as a freshman music ed major and tuba player I began my study with Arnold Jacobs. We studied at his house for the first eighteen months and, in January of 1974, he got the fabled studio on the 4th floor of the Fine Arts Building on Michigan Ave.

After receiving a BME from Northwestern University I spent the next 5 years in Civic Orchestra, teaching privately and playing tuba in the Chicago area while continuing almost weekly lessons. Because of Mr. Jacobs I was able to break into the radio/TV commercial recording and play 12-14 weeks a year with the Chicago Symphony. In 1982 I left to play a 1-year contract in the St. Louis Symphony and in 1983 to become Principal Tuba in the Baltimore Symphony where I played for 31 years until retirement.

At the age of 18 I asked Mrs. Jacobs if it was true that he only had 1 lung. She assured me that the myth had come from his teaching of a trombone player who had had a lobe removed. However, Mr. Jacobs' asthma and emphysema caused him to have about half of the usable lung capacity of most males. Yet even with all his physical difficulties he was an amazing teacher and orchestral musician.

MYTHS

*People don't think Arnold Jacobs taught physical aspects of playing such as tonguing and embouchure. They think he just talked about mentalization and visualization.

*People thought he taught students to use no pressure when playing.

MAGIC

*His sound.

*The different tone colors and sizes of sounds that he could create..

*His personality.

MENTORING

*His passion for playing and teaching.

*His focus on the player in the studio.

*Incredible knowledge of physiology and psychology.

David Fedderly, Retired Tuba, Baltimore Symphony; Professor, Peabody and Univ. of Maryland

Charles Schuchat, Tuba Professor, Roosevelt University

Here are some of the fundamental drills that I use. They are great for developing great tone production and were some of the most basic drills I worked on with Arnold Jacobs. To me that book is the best example of a Jacobs's daily routine.

Hal Leonard granted permission for this handout.

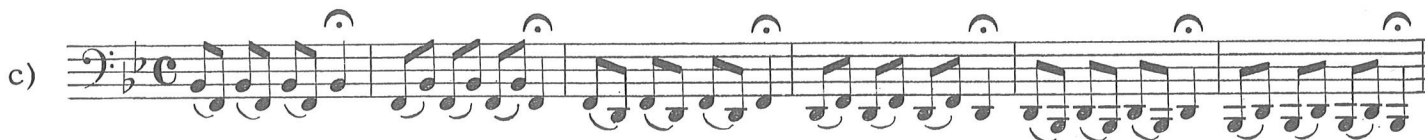
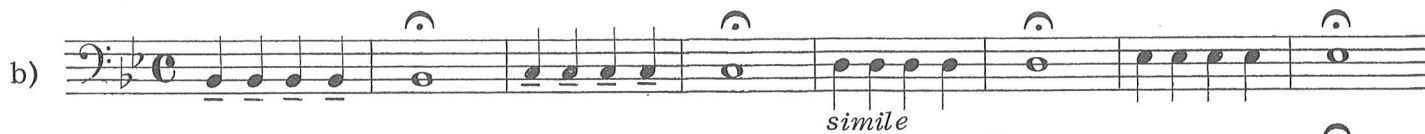
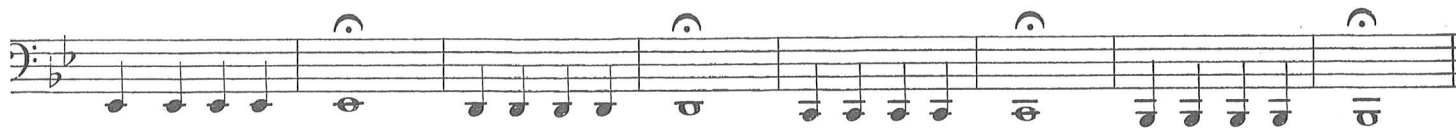
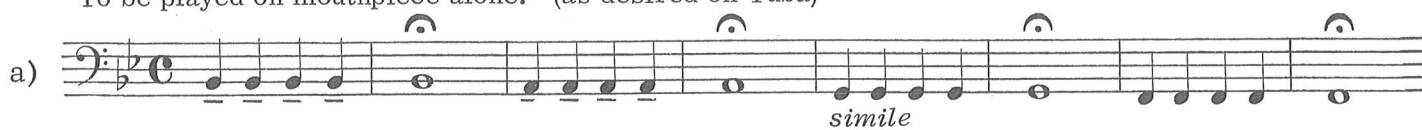
SPECIAL STUDIES FOR THE TUBA

by Arnold Jacobs

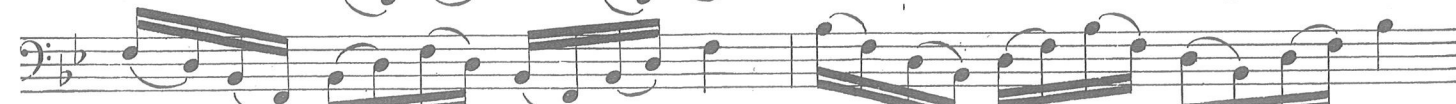
1 - MOUTHPIECE DRILL-

I have included a page of exercises to be played on the mouthpiece without the Tuba. I believe this type of practice to have many benefits and recommend at least 5 to 10 minutes of playing before starting practice on the Tuba. This practice should include melodies as well as drill forms. Expanding the range, particularly in the high notes, is a great help to the player. Many times he will achieve success on the mouthpiece before he will on the Tuba, thereby making it easier to transfer the new ability to the instrument.

To be played on mouthpiece alone. (as desired on Tuba)



Stop for breath as needed.



2 - TUBA DRILL -

(As desired on mouthpiece alone).

a)

descend to

b)

Slow

mf

c)

Slow

d)

e)

Practice in all keys using various dynamics. Also practice each phrase crescendo  and decrescendo .

3 - INTERVAL STUDY -

Transpose to all keys and play with various dynamics:

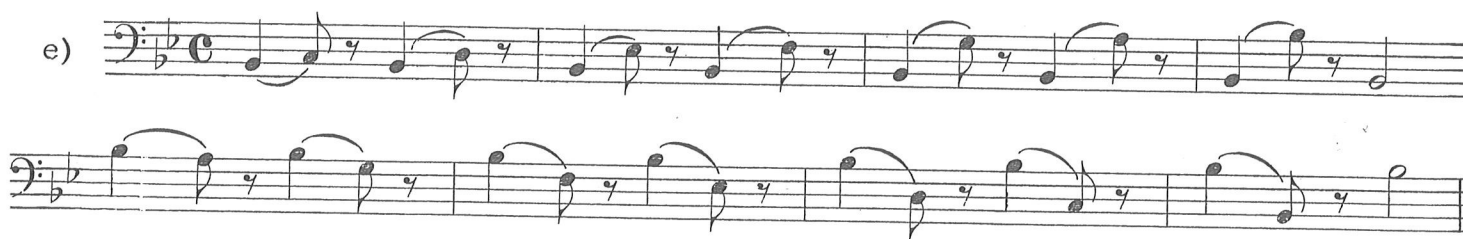
a) 

b) 

c) 

d) 

This study is excellent for development of attack and extending the range in both directions:

e) 

4 - EMBOUCHURE BUILDING -

Continuous sound in itself is embouchure building and when it is carried throughout the range of the horn, (and we must include dynamic range as well as pitch range), we will certainly bring about embouchure strength. If we include fast changes of pitch in interval form as well as scale form, then we shall achieve our goal as velocity tends to refine the embouchure form and to reduce the amount of change in musculature involved.

5 - TONE BUILDING -

One of the most important factors, in approaching the tone building studies, is to do so with a plentiful supply of air in the lungs, and to use a considerable volume level as *f*or better. Great care must be used so that the tone doesn't sound forced or strained.

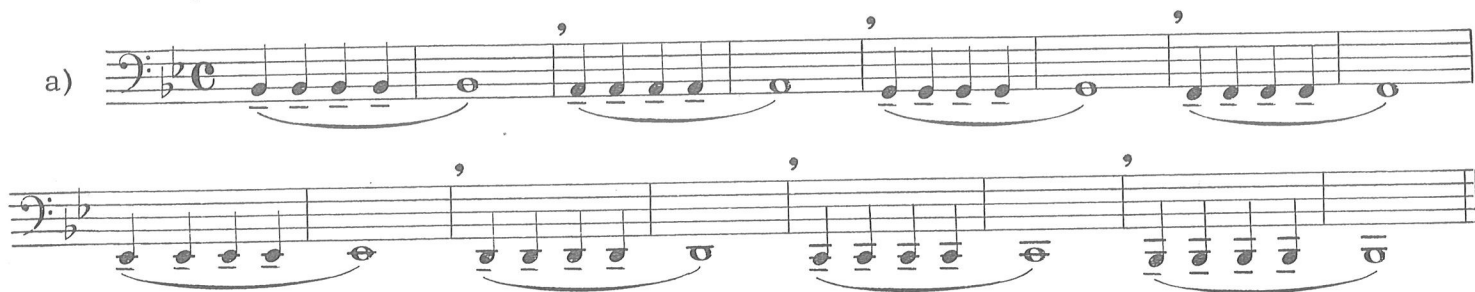
If the student cannot achieve the full phrase on one breath he should be permitted a second breath as needed. The sound must be of prime importance in these studies, and the length of phrase per breath should not be evaluated until considerable success has been achieved with the tone.

A constant effort must be made by the student to think musically. He should develop the ability to hear the sound in his mind that he wants to hear from his Tuba. This is a tremendously important concept and should be encouraged by renewing it daily.

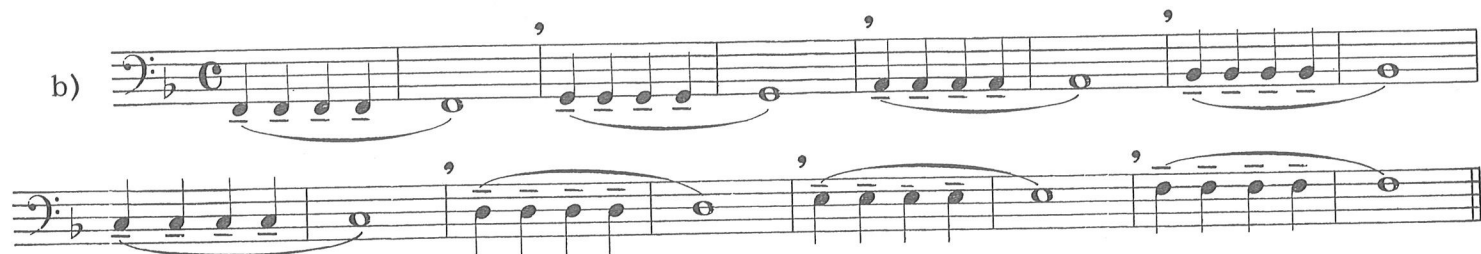
To be practiced at one dynamic level; also



a)



b)



c)



d)



To be practiced at one dynamic level; also  and .

Slow

e)



A musical exercise for bass clef, consisting of seven staves. The first staff is in C major (one sharp) and common time. It begins with a half note C2, followed by eighth notes D2, E2, F2, G2, A2, B2, and C3. A slur covers the eighth notes from D2 to B2. The exercise continues with various rhythmic patterns, including eighth and sixteenth notes, and rests, across the remaining staves. The key signature changes to C minor (three flats) on the second staff, and then to D minor (two flats) on the third staff. The exercise concludes with a double bar line and a key signature change to D major (two sharps) on the final staff. The exercise is marked 'Slow' and is to be practiced at one dynamic level, with crescendo and decrescendo symbols indicated in the text above.