

Ebbers, Paul, "Masterclass Tuba: Arnold Jacobs", ACCENT, Spring 1978

Arnold Jacobs has been a member of the Chicago Symphony Orchestra for 34 years. He is well known as a teacher of breathing techniques and has given clinics throughout the United States and Canada. He is also a member of the Chicago Symphony Brass Quintet.

### The Inner Ear

I always start a player off by having him listen to me play a note. I use his mouthpiece and tuba so that the only variable is the player. Then I say, "This is how you must sound. This is your instrument and your mouthpiece; the only difference is that I'm playing them. It's up to you to sound like I did." He may not know how he's going to get that sound, but it must be planted in his mind right away. Listen to other players to learn what sound you would like to make. It's nice if you can listen to tuba players but you can benefit from listening to a fine trumpet player too. All you have to do is think two octaves lower. The idea is to accept the challenge that your art form is made of sounds. You can't just blow and wonder what's going to come out. You must know what you would like to have come out of the horn and then use the horn to express yourself. You must develop the person who's going to play the tuba, not the tuba - it is just a piece of brass.

### Practice

Long tones, like the ones in Arban's trombone or trumpet book, page one, are magnificent exercises. Each time you play a note you have to think of what you want the note to sound like and then compare it to the actual sound you made. Being aware of your actual sound is only useful if you know what you want to sound like.

Practicing scales, interval studies, and daily drills helps to develop ability, but we also need to play music. If a prize fighter only did calisthenics he'd have his head knocked off in the ring. The same thing is true with the musician. We have to be exposed to interpreting music as well as playing drills, even in the most elementary stages of our playing. If we play "America" it's not going to be very difficult, but it has to be good. It has to match the word patterns and the emotional state of the music. You don't want to learn how to play the tuba, but how to express yourself through the tuba.

### Analyzing Your Playing

If you can have one tool other than the instrument, it should be a tape recorder. I would sacrifice every other aid to have this objectivity after playing. Players tend to analyze while they are playing. If we want to issue statements, we must do the analysis after we play. If you don't have a tape recorder, play a phrase, stop, and in the silence after playing, think about how you sounded and compare that to how you wanted to sound. The worst thing to do is analyze while you are playing.

### Mouthpiece Practice

Playing on the mouthpiece alone removes the instrument but it does not remove the need to think. Mouthpiece practice helps connect the ability to hear a pitch in your head with the ability to play the pitch with your lips. Many players don't send a pitch into the instrument; they just blow and use their fingers to find the notes. Invariably, successful players can sing their parts. If you learn to sing using your voice to create the right pitch, sound, and style, the concepts can be transferred to an instrument. The same ideas will apply to the "vocal chords" of the tuba - your embouchure.

## Air

Try to avoid getting to the end of your breath. Start with more air than you think you'll need so that you can protect the ends of phrases. You should be free to waste your breath and not have to conserve it. If you can establish and control a good tone, you will have controlled the air as well.

Tuba players use air very freely, under low pressure but in fairly large quantities. If we feel free to use this much air, we can concentrate on our tone and on our message to the audience. In order to do this we must try not to use the last quarter of our lung capacity.

## The End Product

When a man designs a machine, he puts a set of controls in the design so that you operate the machine with the controls and not by manipulating the machine itself. The human body is somewhat like a machine in that the controls are in the brain, not in the muscles. If we want the embouchure to function, we must put a message in the brain that will bring this about. We do this by studying the sound that an embouchure makes. Learning by trial and error is perfectly legitimate, but the ultimate focus must be on singing with the lips. This is very basic for any brass instrument. It is not enough to study the various muscles of the embouchure and the diaphragm. You have to learn the thoughts that will bring about the right physical response.