

An Integrated approach to Playing the Saxophone

by Stephen Duke

The 20th century is an extraordinarily rich time in music history. As American saxophonists we are caught between two traditions: classical and jazz. The former has its foundations in the evolution of European culture, and dominates traditional conservatory teaching. Its common practice matured long before the saxophone became "the new kid on the block." The jazz tradition evolved from the streets of our black community and became a unique American art form: a music that the saxophone and its players are so strongly identified with that the music, artist, and instrument are inseparable. The jazz-classical dichotomy creates a unique problem for university saxophone classes, while at the same time it presents a tremendous opportunity. Saxophone teachers and their students are sitting front-row-center in what has become a significant controversy within the educational community.

This article focuses on the relationship between the techniques and styles of these traditions and suggests an integrated approach to performing that can be applied in a universal manner. Learning to play both jazz and classical styles requires a multilevel investigation. Isolating one element of performance is like talking about how to jog but limiting the discussion to the function of the feet. Challenges that confront saxophonists in learning both musics involve, among other factors: improvisational skills, technique, aural perception, and psychological barriers.

Although jazz is largely improvisational, it is important to differentiate improvisation from interpretation. Improvisation incorporates compositional techniques and is not limited to a particular style. In traditional Western European music for example, Bach, Mozart, Beethoven, and Liszt were well known for their improvisations. It is interesting to note that classical music has nearly lost the art of improvisation in the 20th century, and jazz pedagogy has become almost exclusively theoretical. The private studio teacher can play a crucial role in filling these voids.

The phrase "classical music," or style, refers to music based on traditional Western European styles that include Renaissance, baroque, classical, romantic, and early 20th-century musical idioms and their various stylistic nuances. The term "jazz" refers to styles of music including Dixieland, blues, swing, be-bop, funk, rock, etc. While there are reasons for distinctions within classical and jazz musics, the fundamental techniques used within jazz styles are basically the same, and the fundamental techniques used throughout classical styles are basically the same. But the differences between jazz and classical techniques are considerable.

A performer oriented toward classical or jazz music can develop habits of technique that reflect a bias in style. Learning to play unfamiliar and fundamentally different styles is complicated by compulsive motor skills. In general, the longer a musician plays in one style the more ingrained his habits become.

One example is the manner in which accents are produced. It may never occur to a classically oriented player who has initiated changes in air speed from the abdominal, chest, or throat areas, that in jazz music the tongue touches the reed on "ghosted" (or softer) tones and releases the reed for louder tones, and that the jaw moves backward on soft tones and

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forward on louder tones. The reverse is almost always true for jazz oriented players who are learning classical style. Unnecessary movement back and forth by the jaw at the beginnings of tones is common with many jazz oriented players who are learning classical style. The sound produced often has an air sound before the tone and the initial sliver of the tone is unfocused. If asked if the air sound before the tone is perceived (and usually before the intended placement of the tone), the player usually answers no. In addition, the player may find it difficult to stop the unnecessary jaw movement even when he watches himself in a mirror.

In learning both jazz and classical styles it is important to develop clear image, aural perception, and sensation of producing the sound. The relationship among these factors often confuses the player who has developed the ability to discern sounds but who hasn't experienced the sensations associated with producing them. Classically oriented players, for example, may perceive the difference between jazz and classical accents and may even hear that they are not executing jazz style; but they still cannot produce a jazz accent because they compulsively apply inappropriate technique.

It is interesting to note that when classically oriented players use classical technique to play jazz style, their unconvincing interpretations are generally viewed as poor conception. When jazz oriented players use jazz technique in interpreting classical style, it is usually thought to be technical deficiency. In either case, what is seemingly "good" technique in one style may be "bad" technique in another. When a player is learning to play both classical and jazz styles, the need for a more flexible technique increases because the sound possibilities are expanded.

Appropriate technique is determined by our intentions as performers: can we produce the sound we attempt? To avoid bias in style, I view the sound of the instrument in terms of its "prime numbers": pitch, timbre, time, and loudness. "Good" technique consists of these four elements integrated with flexibility, ease, spontaneity, and aesthetic quality.

One of the main differences between jazz and classical styles is the role that ambient silence plays in the performance setting. In concert and recital halls, the behavior of the audience is understood to be quiet. Many players evaluate the quality of their own performances by listening to the intensity of the audience's silence. In playing jazz, silence is an integral element of the musical composition and improvisation, but the audience may not be silent. In clubs, listeners smoke, drink, and even eat during performances, and if an individual is moved he will immediately say so.

The intensity of the silence is affected by the sound of the beginnings and endings of tones. These slivers of sound are

determined by the differences in technique used to initiate change in air speed. In classical style the change initiates from the throat, chest, and abdominal areas. In jazz style, particularly in be-bop and later styles, the change in the air stream is initiated by the damping of the reed by the tongue and the movement of the jaw, and the muscles in the chest and abdominal areas react to the change in resistance. I call the use of the tongue and jaw to initiate changes in air speed "peripheral" air control.

One exercise that helps develop a feeling for resistance in the air stream used in jazz style is the insertion of a rag or towel into the bell of the saxophone. The rag should be large enough to fit firmly into the bell. Position the rag so that the end reaches somewhere between the low b and low e-flat tone holes. Play a chromatic scale from g-1 to g-2 and back. Notice a significant change in timbre and dynamics at the c-sharp-2 to d-2 register break. The object of the exercise is to play with an even timbre and volume by increasing the speed and pressure of the air stream. The timbre and volume change depends on how far the rag is pushed into the instrument and how tightly it fits into the bell. After a few minutes of trying to balance the sound, pull the rag out of the instrument and play loudly.

To simulate the air stream used in classical style, take a large breath of air, and open the throat and mouth wide while holding the air in. With the throat and mouth open, let out a small amount of air from the mouth and then slowly draw it back in. The lungs will feel as if they remain full of air during this process. Observe that the thorax, or rib cage, expands upward and outward, and the abdomen is expanded downward and outward.

Most of the problems that jazz oriented players experience in learning classical style are caused by how the jaw, tongue, and embouchure (peripherals) are used to initiate changes in the air speed. Likewise, nearly all the problems that classically oriented players have in learning jazz style are caused by initiating changes in the air speed from the glottis, chest muscles, diaphragm, and/or abdominal muscles. Listed below are some of the common sounds that players unintentionally produce when playing an unfamiliar style.

Jazz to classical difficulties:

- Unresponsive articulations
- Accents and changes in the air stream are lethargic
- Reed vibration is constricted
- Extreme soft dynamics with clear tone are unresponsive
- Vibrato is lethargic
- Overall pitch is sharp
- Register changes are difficult
- Subtone at extreme soft dynamics
- Subtone in low register
- Too much air in sound at soft dynamics
- No subtle change in dynamics
- Abrupt phrase endings and note endings
- Uneven timbre
- Inappropriate timbre
- Noise between tones
- Pitch sharp in high register
- Air precedes tongued articulations
- Unfocused tone at beginnings of tongued articulations
- Articulation too heavy
- Tone does not speak with only the breath
- Tone clips when slurring over the register break
- Breaks in air stream

Classical to jazz difficulties:

- Exaggerated swing feel on eighths
- Over-ghosting
- Over-accenting
- No subtone
- Too many tongued articulations
- Vibrato too fast
- Endings of phrases always taper
- Too many changes in dynamic within a phrase

Developing a clear concept of style by listening to and copying other performers is crucial.

The embouchure

The embouchure plays an important role in jazz and classical styles. The degree to which the embouchure controls the tone varies from player to player. Some view the function of the embouchure as keeping the air from leaking out around the mouthpiece, whereas others feel that the embouchure plays a more active role in controlling the sound. In classical playing, I view the embouchure as being minimally active in controlling the tone, and I emphasize the coordination of the abdomen, thorax, and throat.

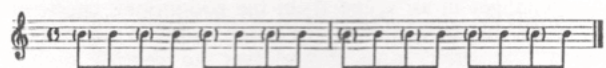
Regardless of stylistic orientation, embouchures vary greatly, from anchoring the tongue behind the bottom lip to playing with a "double lip" embouchure. The description of the embouchure given by Larry Teal and James O. Froseth serves as a good reference. They advise the player to: place the upper teeth on top of the mouthpiece approximately 1/2 inch from the tip; cover the lower teeth with a cushion of lower lip; seal the lips around the mouthpiece by pushing the corners of the mouth inward toward the center of the mouthpiece. The upper and lower teeth should be approximately aligned; avoid biting, puffing the cheeks out, and let the chin be relaxed. (Larry Teal and James O. Froseth, *Introducing the Instruments: The Individualized Instructor Preliminary Book, Text and Full Score* [Chicago: Music Learning Research Division of G.I.A. Publications, Inc., 1977], 42-43.)

Many jazz players use what is commonly referred to as a "flat lip" embouchure. It is basically the same as the embouchure described by Teal and Froseth, except that the jaw drops down, the bottom lip rolls out slightly, and the chin is bunched and drawn upward toward the reed. The lip is more mushy and has more surface contact with the reed. Although generally considered "incorrect" in classical teaching, this embouchure allows for the production of tones idiomatic to jazz style, such as subtone in the low register.

The jaw in jazz style

One way the jaw is used in jazz to change dynamics and timbre is to "ghost" and to accent tones. To produce a softer and darker, or ghosted sound, the jaw is pulled back so that it slides toward the tip of the reed. This movement functions to damp the reed by restricting reed vibrations, reducing the volume of air moving through the mouthpiece, and changing the shape of the oral cavity. To produce a louder and brighter sound the jaw is pushed forward and slides down and away from the tip of the reed. This allows the reed to vibrate more freely and allows more air to move through the mouthpiece. The shape of the oral cavity also allows for a brighter-sounding tone in this position. Note that the technique of moving the jaw back and forth to change dynamics and timbre should not be confused with the up-and-down movement used to produce a jaw vibrato.

Notated below is the way in which jaw accents would be typically applied in playing eighth notes. The notes that are enclosed in parentheses are ghosted.



The tongue in jazz style

Like the jaw, the tongue can ghost a tone by slightly touching the reed. This partially restricts the reed's vibrations and the amount of air moving through the mouthpiece. For prominent-sounding tones the tongue does not touch the reed, allowing it to vibrate freely. The tongue restricts the reed in varying degrees: the more the tongue touches the reed the more the tone is ghosted. Some players prefer touching the reed more to one side.

Play the above example again and substitute touching the reed slightly with the tongue for the backward movement of the jaw. Note that using the tongue to produce ghosted tones instead of using the jaw may alter the sound and therefore the interpretation. Both the tongue and jaw may be used simultaneously to accent and ghost notes. The degree to which each is used depends upon the individual's interpretation.

Developing a clear concept

Developing a clear concept of style by listening to and copying other performers is crucial. Learning by imitation is very effective, but unfortunately it has not been fully utilized in academia. Classical playing heavily emphasizes reading from the music. Jazz pedagogy has omitted a predominant way that previous artists learned: by developing aural memory through mimicking. Memorizing classical repertoire or aurally improvised jazz solos helps keep the eyes from interfering with the ears.

An efficient way to begin to familiarize oneself with the details of style is simply to listen to what is happening in the sound, and then relate the analysis to the elements of tone and the sensations associated with making that sound. The tongue, jaw, fingers, embouchure, etc., manipulate timbre, pitch, time, and dynamics to form articulations, accents, endings of tones, glissandos, vibrato, time variation, etc. The eventual goal is to be able to relate the imagined sound or listening experience to physical sensations without analysis.

In analyzing how a player bends a pitch in jazz style, the following questions may be asked (words in parentheses refer to applicable tone control elements):

- Exactly when does the pitch-bend start? (time)
- Does the pitch-bend begin on a lower tone? (pitch)
- At what rate does the pitch rise? (pitch, time)
- What is the exact pitch at the beginning of the pitch-bend? (pitch, time)
- What is the exact pitch at the end of the pitch-bend? (pitch, time)
- When does the bending of the pitch end? (pitch, time)
- Is there a change in dynamics from the beginning to the end of the pitch-bend? (dynamics, time)
- What does the jaw do to produce the pitch-bend? (sensation)
- Are the fingers used to help pitch-bend the tone? (sensation)

Experimenting with ways to play new styles more objectively is valuable. It may be helpful to visualize a graph of the sounds heard in non-metered or real time. Often, players are aware of sounds they make at some moments and not aware at other moments. For example, they may hear the point at which a tone begins but will not hear air noise before that point. Analyzing sound in real time focuses the attention to moments that may not usually be noticed.

Another way to learn the technique of an unfamiliar style is to think of it as an extended technique, meaning that it is not yet elemental to everyday performance. Once the technique matures and becomes integrated, it will be available without making a conscious effort.

Finally, a person's motives for learning another style affects the learning experience. Classical players frequently want to learn jazz because they want to become more marketable. Jazz players frequently want to learn classical music because they want to work on their "chops." Both jazz and classical music are art forms, and as such they demand commitment.

Classically oriented musicians rarely view learning classical music as mere exercise, and jazz oriented musicians are rarely motivated to learn jazz solely for monetary gain. In short, learning music in order to "use" it leaves out a basic value: music as "art for art's sake." Learning both musics in good faith will develop a dynamic understanding of how to control the instrument, and that will contribute to the musician's artistic maturation.

Much of the content of this article is based on or inspired by my experience as a performer and teacher, as well as study and years of collaboration with James Riggs, James Oglivy, and Donald Sinta. Research on flute vibrato by Jochen Gartner and investigations concerning learning, awareness, and movement by Moshe Feldenkrais and Milton Erickson, among others, have also influenced my perspective. Listed below are selected readings that I feel are pertinent to the understanding of learning and performing.

Moshe Feldenkrais, *Body and Mature Behavior* (New York: International Universities Press, Inc., 1949).

Moshe Feldenkrais, *Awareness Through Movement* (New York: Harper & Row, Publishers, Inc., 1977).

Moshe Feldenkrais, *The Elusive Obvious* (Cupertino, Calif.: Meta Publications, 1981).

Jochen Gartner, *The Vibrato: With Particular Consideration Given to the Situation of the Flutist* trans. Einer W. Anderson (Regensburg: Gustav Bosse Verlag, 1981).

Humberto R. Maturana and Francisco J. Varela, *The Tree of Knowledge* (Boston: New Science Library, 1987).

Jeffery K. Zeig, *A Teaching Seminar with Milton H. Erickson* (New York: Brunner/Mazel, Inc., 1980).

About the Author

Stephen Duke is an assistant professor of music at Northern Illinois University, where he teaches saxophone and chamber music. He earned his bachelor and master of music degrees at North Texas State University, and he is presently studying Feldenkrais Method. Mr. Duke has recorded a set of improvisations based on Thelonious Monk's music with pianist Joseph Pinzarrone titled *Composer, Thelonious Monk*. This article is adapted from sections of Mr. Duke's forthcoming book on saxophone technique titled *Controlling the Saxophone*.

