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Interpretation, Pedagogy, and Technique in Clarinet Repertoire as Reflected in the Practice of Contemporary New York Clarinetists

by

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A dissertation submitted to the Graduate Faculty in Music in partial fulfillment of the requirements for the degree of Doctor of Musical Arts, The City University of New York

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THE CITY UNIVERSITY OF NEW YORK

Acknowledgments

This dissertation is dedicated to my parents, my families, and my wife.

They all have supported my life in the past 32 years.

Abstract

Interpretation, Pedagogy, and Technique in Clarinet Repertoire as Reflected in the Practice of Contemporary New York Clarinetists

by

Kang-Kuo Ho

Adviser: Professor Ronald A. Roseman

This paper investigates the pedagogy and background of a few famous clarinetists in the Greater New York area. They are: Stanley Drucker, Anthony Gigliotti, David Glazer, Alan Kay, David Krakauer, John Moses, Charles Neidich, Kalmen Opperman, and Bernard Portnoy. My primary goal is to compare different interpretations of some nineteenth- and twentieth-century clarinet works. Secondarily, since clarinet techniques such as glissandi, double-tonguing, multiphonics, and circular breathing have been widely employed and extended in recent years, I want also to explore the influence on pedagogy that these clarinet techniques might have.

An additional purpose of this project is to document current teaching methods and musical interpretations in New York, in comparison with past practices. Moreover, this dissertation compares the differences in pedagogy among clarinetists, and demonstrates the varied ways in which changes in historical perspective and modern compositional demands have influenced not only current clarinet pedagogy but also interpretation of solo repertoire in New York.

PREFACE

This paper investigates the pedagogy and background of a few famous clarinetists in the Greater New York area. Scholarly research such as George Dazeley's "The Original Text of Mozart's *Clarinet Concerto*,"[1] which suggested playing Mozart's *Clarinet Concerto* with a basset instead of the regular clarinet, has widened clarinetists' choice of interpretations. With these discoveries in mind, my primary goal is to compare different interpretations of some nineteenth- and twentieth-century clarinet works. "Will young clarinetists play the Mozart *Clarinet Concerto* with an extended basset clarinet?" is an example of one question posed. Secondarily, since clarinet techniques such as glissandi, double-tonguing, multiphonics, and circular breathing have been widely employed and extended in recent years, I want also to explore the influence on pedagogy that these clarinet techniques might have.

I discuss various methodologies and pedagogical techniques learned through interviews and by auditing the lessons of the following successful clarinetists and teachers in the Greater New York area: Stanley Drucker, Anthony Gigliotti, David Glazer, Alan Kay, David Krakauer, John Moses, Charles Neidich, Kalmen Opperman, and Bernard Portnoy. I demonstrate various ways that changes in historical perspective and modern compositional demands have influenced current clarinet

[1] The Music Review, IX. 1948, pp.166-72.

pedagogy in New York.

An additional purpose of this project is to document current teaching methods and musical interpretations in New York, in comparison with past practices. Since the clarinet has been frequently employed not only in the traditional classics, but also in popular music (such as jazz) in the twentieth century, this paper reviews research on the changes in clarinet pedagogy and interpretation from the early part of this century to the present time, and explores the influence of modern materials (such as those used for the instrument, barrels, mouthpieces, reeds, and ligatures) and techniques (such as multiphonics, flutter-tonguing, circular breathing, glissandi, and double-tonguing) on ways of teaching and performing. Moreover, this dissertation compares the differences in pedagogy among clarinetists, rather than simply describing their personal teaching experiences, and demonstrates the varied ways in which changes in historical perspective and modern compositional demands have influenced not only current clarinet pedagogy but also interpretation of solo repertoire in New York.

This dissertation is organized pedagogically. PART I serves to clarify the purpose and goals of this dissertation. PART II introduces the immutable fundaments of clarinet playing, as though to a new student.

PART III builds upon PART II, leading readers through more advanced techniques, including a discussion in Chapter V of the history of and relationship between clarinets and clarinet playing. My interviews with accomplished clarinetists were conducted within the context of this history and relationship; in interpreting

these interviews, I especially focus upon how the current interpretation and pedagogy of standard clarinet repertoire reflect the influences and changes of time. Finally, Chapter VIII concludes my dissertation by looking toward the future of clarinets, clarinet playing, and clarinetists.

PART I: INNOVATION VERSUS FUNDAMENTALS: WHAT IS CHANGEABLE AND WHAT IS NOT?

It seems that nothing escapes change in this world. Changes occur in the way that people work for a living and the way that they seek entertainment. No one will refuse a modern product such as a refrigerator or television. People only vary in their degree of dependence on novel devices.

Music has been a part of people's lives for thousands of years. And musical instruments and repertoires have changed over that time. Musical interpretation and the instruments people play today are different from those of the time when many major works were first composed; nevertheless, it is not absolutely necessary to use historically "authentic" instruments and interpretations to perform these works. Even though some elements of music change, many remain constant. For clarinetists, the fundamental training of breathing, tonguing, etc., and the methods used to instruct a young beginner remain much the same as they always were.

The fundamental training, development of physical endurance, and general techniques of clarinet playing will not change much, because the structure of the human body does not change. On the other hand, contemporary changes in techniques and in the materials used in instruments, for instance, have changed clarinet playing. These changes filter back into the approach to clarinet repertoire, altering the interpretations of music.

Chapter I: The Purpose of the Interviews

When I auditioned for the admissions committee for the Music Class of Kwan-Jen High School in Taipei, in 1981, I played the second movement of Mozart's Clarinet Concerto and the second movement of Brahms's Clarinet Sonata op. 120, no. 2. These two pieces were actually the first two works of the standard clarinet repertoire that I had learned, since at that time I had received only one year of clarinet lessons. Years later I still play these two pieces in my concerts. For example, I included the Brahms sonata in the first recital I played for the doctoral program of City University of New York, which took place at Queens College in 1994.

Musicians play the same repertoire over and over, especially popular pieces by Bach, Haydn, Mozart, Beethoven, Brahms, Debussy, and others. But no musician plays this music in the same style all the time. As with all human behavior, musicians change their musical renditions according to circumstances. Therefore, most musicians, over time, change their interpretation of certain pieces for their own individual reasons. Although I have played the same pieces for fifteen years, I have performed each of them differently at different times, influenced by changes in my life.

Some clarinetists (and musicians in general) avoid the smallest change in interpreting music because they want to respect the original concept of the composers. This attitude preserves, as closely as possible, the tradition from previous generations. On the other hand, clarinetists who want to discover a new

style of playing learn new techniques and experiment with the many possibilities of their instruments, responding to and exploring new demands from contemporary composers. Topics that concern the clarinetist, such as modern versus traditional musical style, or contemporary versus fundamental techniques, are all important and debatable issues in the current musical world. I therefore want to investigate and demonstrate how all the changes in our lives, instruments, and techniques have influenced musical interpretation, pedagogy, and techniques of contemporary New York clarinetists.

1. *The World Is Changing*

During my first lesson with John Moses in New Jersey in the fall of 1997—my first month in New York—an overwhelming sense of peace washed over me as I entered his cozy house. Compared to Taipei, Taiwan, my native city, where most people live in small apartments and endure air pollution as well as heavy traffic, the New Jersey suburb where the Moses family resides is quite a beautiful place to live. At the time, I wondered if all musicians in New York enjoyed their life in such a comfortable environment. With so many people eager to hear musical performances and to go to shows, New York seemed to offer a limitless audience for musicians. My first impressions made me feel that all musicians in this area must enjoy success in their profession.

After two years, when I enrolled in the doctoral program in the Graduate Center of the City University of New York, I began to realize that the musical

profession could not support each musician as a soloist because competition in this field, especially in this nation, is stronger than ever before. Many musicians have returned to school to obtain a doctoral degree because their profession now requires it. Except for superstars like Pavarotti or Domingo, musicians cannot simply play in concert halls and receive sufficient support as they did in the past. Instead, musicians must create a unique career niche or develop various other sources of income in order to make a living.

This year, when I went back to visit John Moses at his home, I found an addition to his family—a newborn son. He told me that he had just performed the Brahms Clarinet Quintet employing a little vibrato, which is not usually done. It seemed that his happiness over the birth of his child was reflected in the way he chose to play that piece. His life was changing and so was his music.

These incidents made me realize that musicians cannot remain on a static level. Since the musical world changes frequently, individuals need to observe these changes and either follow the mainstream or develop new styles. There are always a few people who receive wide acclaim and achieve success in each generation. If musicians cannot establish their own positions in this changeable world, they will disappear. The discovery that the basset clarinet was used to play the Concerto and Quintet of Mozart is an excellent illustration of this trend (see the first section of Chapter VII, "Mozart Clarinet Concerto and Quintet"): clarinetists do not have to play these two pieces on the basset clarinet, but they must be aware of this discovery.

How many clarinetists will follow the changes in the musical field? How do they make their living? How flexible are they when they teach? The answers of clarinetists I interviewed to these questions both reveal the past and point the way to the future. The same trends are occurring not only in clarinet interpretation, but also in its technique and pedagogy. These changes influence clarinetists of all generations. I therefore embarked on this project to investigate how musicians adapt to changes in their field.

By collecting information from clarinetists I interviewed and comparing them to musicians in the past, I intend with this paper to offer a clear picture of how clarinet students at all levels develop their practicing techniques and their musicianship. I hope that the content of this paper will encourage students at all levels not to give up their interest in the instrument because they make mistakes in hand or body position, or have difficulty with their breathing, mouthpiece, reed, or instrument. Furthermore, I hope that these interviews with clarinetists from different generations can portray the changes in clarinet pedagogy, technique, and interpretation to serve as a guide for young clarinetists.

2. Who seeks to innovate? Who concentrates on fundamentals? To Change or Not to Change — Reasons for Interviewing the Selected Clarinetists

It was a great experience to interview so many successful clarinetists. The following clarinetists interviewed during 1997 can be divided into three different age groups: from ages 30 to 50, Alan Kay, David Krakauer, and Charles Neidich; 51 to 70, Stanley Drucker and John Moses; and 71 and over, Anthony Gigliotti,

David Glazer, Kalmen Opperman, and Bernard Portnoy. Clarinetists from different generations possess diverse interpretative styles because of their various backgrounds and experiences. Dividing these clarinetists according to the type of setting in which they usually perform, there are orchestral players, such as Stanley Drucker, Anthony Gigliotti, John Moses, and Bernard Portnoy; chamber players, such as David Glazer, David Krakauer, and Charles Neidich; commercial players, such as John Moses, Kalmen Opperman, and Bernard Portnoy; soloists with considerable mastery of techniques, such as Stanley Drucker and Charles Neidich; and contemporary players, such as David Krakauer and Charles Neidich. I choose to interview these particular clarinetists not only because are they outstanding in their field, but also because they belong to several different schools of playing, reflecting their own teachers' experiences, choice of clarinet position, style of teaching and playing, and preference in sound.

Stanley Drucker was born in Brooklyn, New York, and studied at the Curtis Institute of Music. He studied the clarinet with Leon Russianoff,[2] beginning at the age of eleven, after having been given one year of clarinet lessons for his tenth birthday. As a teenager, he played in the National Orchestral Association, going through orchestral training three times a week. In addition, he played many contemporary pieces in a woodwind quintet. Drucker's early experiences as an orchestral and chamber player greatly improved his musicianship. He secured his

[2]Leon Russianoff, B.S., City College of New York, was one of the leading teachers in New York City. He studied clarinet with Simeon Bellison and Daniel Bonade. He played clarinet for NBC and CBS radio and for ballet companies. He was on the faculties of the Juilliard School of Music and Brooklyn College. Russianoff died in 1990 in his late 70s.

first job at the age of 16 as a solo clarinetist in the Indianapolis Symphony; later, he became the principal clarinetist in the Busch Chamber Players and the Buffalo Philharmonic. In 1948, at the age of 19, Drucker became the youngest member of the New York Philharmonic, of which he is the current solo clarinetist. Mr. Drucker received the National Academy of Recording Arts and Sciences' Grammy nomination in 1982 for Best Classical Performance—Instrumental Soloist with Orchestra. His biography is included in the *New Grove's Dictionary of Music and Musicians*, and he has been on the faculty of the Juilliard School since 1968.

Stanley Drucker is known for his mastery of difficult techniques in clarinet performance. When he premiered the *Concerto for Clarinet* and Orchestra by John Corigliano in 1977, using glissandi and fast legato in several passages, David Glazer commented: "He just did those difficult things so easily that many players would never be able to do."[3] While this does not mean that it is important for every performer to play using such difficult techniques, Drucker's willingness to use them and his success in the field demonstrates a new trend in clarinet playing that involves more contemporary techniques such as multiphonics or glissandi.

Like Stanley Drucker, Anthony Gigliotti is another orchestral player who served in the same orchestra for a long period of time. Mr. Gigliotti is the former principal clarinetist of the Philadelphia Orchestra, a position he held for forty-seven years, from 1949 to 1996. He started his clarinet lessons at the age of ten with his father, who was a student of Daniel Bonade. He graduated from Curtis Institute

[3]Said during interview.

of Music, the same school Drucker attended several years later. After Gigliotti was discharged from the navy after World War II, he became the principal clarinetist in the Little Orchestra Society in New York. Later, he replaced Ralph McLane, who had become severely ill, as the principal clarinetist in the Philadelphia Orchestra under Ormandy's baton. Mr. Gigliotti has been on the faculty of Curtis since 1950; he is also Professor of Clarinet at Temple University in Pennsylvania. In addition to his career as an orchestra member and a teacher, Mr. Gigliotti performs as a soloist in Far Eastern countries such as Japan, Korea, and Taiwan.

Mr. Gigliotti has taught numerous students throughout the United States, including clarinetists who now play in the orchestras of Philadelphia, Chicago, Boston, Cincinnati, and Washington, D.C. Aside from teaching in his native country, Mr. Gigliotti also has given lessons to interested musicians in the Far East. I remember attending the master class he taught in Taipei, which was open to almost all the clarinet students in that area. Most of these students have now started their careers in Taiwan and have begun to teach. When I interviewed Anthony Gigliotti in New Jersey this year, he was a faculty member in a summer camp for young musicians. Although he retired from the Philadelphia Orchestra a year ago, he still performs in many concerts and teaches students with as much energy as before. Gigliotti sets an example for other clarinetists by being active and responsible in educating the next generation of musicians. Gigliotti is a relatively traditional player, who teaches his students the more conventional

methods of interpreting music, enriching tone color, fixing the reed, practicing fundamental techniques, and playing orchestral excerpts. This method of training is always the best for students who are starting their studies in clarinet performance.

Much like Stanley Drucker and Anthony Gigliotti, Bernard Portnoy is another orchestral clarinetist who has enjoyed a long career. He was formerly the solo clarinetist with the Kansas City Philharmonic Orchestra, Pittsburgh Symphony Orchestra, Philadelphia Symphony Orchestra, Cleveland Symphony Orchestra, and the Pablo Casals Orchestra. In addition, he was a soloist with the Budapest String Quartet. Mr. Portnoy was Professor of Music at the University of Southern California, Juilliard School of Music, Indiana University, Yale University, and the Curtis Institute. He is now retired and living in San Francisco.

Portnoy is an enthusiastic teacher of the traditional school, whose method of teaching is similar to that of Gigliotti. I will always remember the time when Mr. Portnoy first came to Taiwan and gave me his specially designed ligature and cap to fit his BP-02 mouthpiece.[4] I used them during the private lessons I took; the gift encouraged me to further study the clarinet and finally brought me to America. This anecdote from my personal life illustrates the influence that an accomplished musician can exert on interested young players.

Unlike the orchestral players mentioned above, David Glazer has spent his

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[4] This mouthpiece is designed by Bernard Portnoy and had been manufactured from 1963 to about 1980.

life playing chamber music. He was a member of the New York Woodwind Quintet for over thirty years, beginning in 1951. He teaches at various institutions such as the Hebrew Arts School at New York, the State University of New York at Stony Brook, and the Aaron Copland School of Music at Queens College.

Mr. Glazer is a jovial man, who remembers many anecdotes, some dating back to the 1920s. When I met him in his gorgeous apartment next to Central Park, he told me about the first job he got as a music teacher in high school, as well as about his life in Boston and New York. The most interesting thing he told me was the following: "I never played with vibrato until I joined the New York Woodwind Quintet. They asked me to somehow play with a little vibrato, because all other members did that, and it seemed logical to do what others do." Since joining the quintet Glazer frequently plays with vibrato. In a recording he made in 1986 of the Mozart *Clarinet Concerto*, one can clearly hear the vibrato in his music—not quite as much as a jazz player generally uses, but just a slight and slow vibrato to enrich the tone color. To Glazer, the two most important features of a successful clarinetist are the beauty of the performer's tone color and the depth of his interpretation of the music.

Charles Neidich is another successful chamber music player. He is also a soloist with impressive technical powers. Born in Brooklyn, New York (like Stanley Drucker), Mr. Neidich received a Bachelor of Arts in Anthropology from Yale University and a Post-Graduate Diploma at Moscow State University. In 1975, he became the first American to receive a Fulbright grant to study in the

Soviet Union. He was the winner of the Naumburg Competition in 1985. He is now a member of the New York Woodwind Quintet, the Orpheus Chamber Ensemble, and the period instrument wind ensemble Mozzafiato. Mr. Neidich was on the faculty of the Eastman School of Music from 1985 to 1989, and has taught at the Juilliard School since 1989, and the State University of New York at Stony Brook since 1987.

Mr. Neidich has, in the last fifteen years, changed the way the clarinet is played. He premiered music using contemporary techniques such as multiphonics, circular breathing, double-tonguing, and flutter-tonguing, and has also played electronic music. A typical compliment from his colleagues exemplifies his mastery of circular breathing, a technique he constantly uses: "You never felt his breathing, the phrase he played was just endless!" Such techniques display the full range of sounds that a clarinetist can achieve with the instrument. By showcasing these new sounds for composers, other clarinetists, and the lay audience, I think Neidich's performances will have an impact on the clarinet repertoire in the future. One needs only to look to the example of Benny Goodman[5] to be convinced of my

[5]Benjamin David ("Benny") Goodman (1909–1986), was a master clarinet player, and also the "King of Swing." He grew up in a Chicago ghetto, as one of twelve children of an immigrant tailor who had fled Russian anti-Semitism. His most important teacher was Franz Schoeppe, a classical instructor from the Chicago Musical College. In 1925 bandleader and drummer Ben Pollack hired Goodman. When the band was between jobs, Goodman jammed with members of the Austin High Gang, who introduced him to the New Orleans Rhythm Kings and the Dixieland clarinet style of Leon Rappolo. Goodman accompanied Pollack to New York in 1928 and then joined Red Nichols in 1929.
On Hammond's advice, in 1934, Goodman purchased from the struggling bandleader Fletcher Henderson several of the hot big-band arrangements that helped to make his band's reputation. At a dance in Los Angeles's Palomar Ballroom on August 21, 1935, Goodman, fed up with the sweet charts, boldly called for Henderson's flag-wavers. The crowd was wildly enthusiastic. As much as any single event could have, this performance marked the advent of the Swing Era.

proposition: although not many classical clarinetists liked the way Benny Goodman played, most admit that he created new clarinet repertoire and increased the popularity of the instrument.

As a generous mentor, Neidich frequently encourages students to try different styles in order to interpret music more logically and historically. When I met him at his apartment in the Upper West Side of Manhattan, which has a beautiful view of the Hudson River crossed by the George Washington Bridge (it must be splendid to practice clarinet while looking at this view during a sunset), Mr. Neidich showed me his basset clarinets, and told me these instruments are available for students who want to play the Mozart *Clarinet Concerto* or *Quintet*. A basset clarinet currently costs over three thousand dollars; it can only be used to play two of Mozart's clarinet pieces and a few contemporary works. For students who are not wealthy enough to invest in special instruments, it is a wonderful opportunity to be able to experiment with their mentor's possessions. In this respect, Neidich is similar to Portnoy (who gave me his specially designed ligature and cap to fit his BP-02 mouthpiece) in that they both show interest in increasing their students' access to instruments.

Besides working as an orchestral member, a chamber player, or a traditional soloist, clarinetists can also support themselves by playing in Broadway shows or in commercial recordings, or by participating in free-lance opportunities. For example, John Moses, who is currently the principal clarinetist in the American

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Part of this Information was obtained from Internet http://www.flash.net/~rdreagan/index.html.

Symphony Orchestra, also plays as reed doubler (playing clarinet, flute, saxophone, and recorder) in Broadway shows and commercial recordings. John Moses received his Bachelor and Master of Music degrees from the Juilliard School of Music. Three of his mentors are Mohler, Portnoy, and Allard.[6] Mr. Moses has performed with the American Symphony Orchestra, New Jersey Symphony, New York Philharmonic, New York City Opera Orchestra, New York City Ballet Orchestra, American Composers Orchestra, and many others. He has also played for many Broadway shows, commercials, and films, performing scores for musicals such as *Crazy for You*, *Oh, Kay!*, *Porgy and Bess*, *Sweeney Todd*, and films such as *Interview with a Vampire*, *Age of Innocence*, *Aladdin*, *Beauty and the Beast*, *Fargo*, *Fantastic*, *Pocahontas*, and many others. Mr. Moses is currently teaching at Queens College and Brooklyn College.

Kalmen Opperman is another example of a commercial and free-lance player. Opperman started clarinet lessons at age eleven with his father, who was a flutist. After a year, he went to study with John Krupulli. After another year he studied with Mr. Karpilovsky, then went to Mr. Bellison (1883–1953). Later Ralph McLane became Opperman's mentor in the early 1940s. Mr. Opperman is one of the few clarinetists who has employed double-embouchure (please refer to

[6]Joseph A. Allard, born in Lowell, MA, in 1910, was first clarinet on the Bell Telephone Hour for 18 years and the Du Pont radio show for 19. He took instruction from Gaston Hamelin, Daniel Bonade, Ralph McLane, and Gaston Hamelin on clarinet and Rudy Wiedoeft on saxophone. He played clarinet and bass clarinet with the NBC Symphony of the Air. Mr. Allard was a featured solo clarinetist on the Bell Telephone Hour. He was a respected teacher at Juilliard, Manhattan School of Music, Brooklyn College, Mannes College, and many others. His students included people such as Harry Carney [bass clarinet], Eddie Daniels, Dave Tofani, Eric Dolphy, Lee Konitz, and many, many others in the saxophone and clarinet world, both classical and jazz.

the fifth section in Chapter III) to play clarinet, as his teacher Ralph McLane did. Opperman's student Richard Stoltzman also uses this technique. Mr. Opperman is yet another example of a mentor who helps his students by concerning himself with his students' instruments. For instance, he prepared reeds and mouthpieces, and made technical adjustments for Stoltzman's clarinet.

Of the musicians I interviewed, Alan Kay belongs to a younger generation of clarinetists. Stanley Drucker, Alan Kay, David Krakauer, and Charles Neidich all studied with Leon Russianoff. After the death of Mr. Russianoff, Alan Kay studied with Charles Neidich. Alan Kay received his Bachelor and Master of Music Degrees from the Juilliard School. Formerly the principal clarinetist with the Santa Fe Opera Orchestra, Mr. Kay is currently the principal clarinetist of New York City's Riverside Symphony and the New York Chamber Ensemble. He has received fellowships at Juilliard and at the Tanglewood Music Center, where he was also honored with the C.D. Jackson Award for outstanding achievement as a Music Fellow. Mr. Kay teaches at the Manhattan School of Music, the Juilliard School and the State University of New York at Purchase.

As a clarinetist, Mr. Kay pursues diverse interests in the field of music. Conducting fascinates him, as does listening to the performances by players of other instruments. He thinks that all types of music are similar, whether written for clarinet, violin, or any other instrument, and that only by acquiring different knowledge from varied fields can one make one's interpretation more meaningful. For example, if one wants to play Debussy's *Première Rhapsodie*, one should also

listen to *La Mer* to understand Debussy's compositional style. If one wants to play Brahms's Clarinet Sonata, then it may be helpful also to study Brahms's Cello Sonata and the historic background of the last period of this composer's life. This is a useful approach for all musicians because it will help them to broaden their understanding of the life and thought of a composer, and as a result, to interpret the music more appropriately.

David Krakauer is also part of this younger generation of clarinetists, earning his reputation by performing Klezmer music since 1990.[7] David Krakauer is known as a performer of many diverse musical styles, including classical chamber music and the Eastern-European Jewish Klezmer music. As a member of the Aspen Wind Quintet, he won the 1984 Naumburg Chamber Music Award. Joining the Kronos Quartet as a guest artist, he has performed and recorded Osvaldo Golijov's *The Dreams and Prayers of Isaac the Blind*, which has been released on the Elekra/Nonesuch label in 1997. Mr. Krakauer is a member of the clarinet and chamber music faculties at the Manhattan School of Music and the Mannes College of Music.

For centuries, musicians pleased themselves and others by playing music. Musicians need audiences; many musicians claim that a concert with a full house will make them play more musically and enthusiastically. But audiences also exist outside of the concert hall. They listen to records, attend Broadway shows, stop

[7]Klezmer music has its own style and repertoire. David Terras and Naftule Brandwein are two great Eastern European clarinetists who came to America to make recordings of Klezmer music after 1920.

to hear street musicians, and even pay attention to a musician's daily practicing. Musicians must admit that the audiences today are more knowledgeable than ever before. Audiences can compare good and bad performances and show generosity to street musicians whom they like. The boundaries between various kinds of music, such as classical, popular, jazz, or ethnic styles, have become less restrictive in recent years. For example, the Klezmer music that David Krakauer plays is more accepted by audiences today than it was in the 1930s.

3. *The Goal: To Survive the Changes Occurring in the World of Music*

When we examine the history of New York over the last fifty years, we find that more people today are participating in musical activities. Because of society's increasing affluence, more people are attending concerts, purchasing recordings, and learning musical instruments. The post-World War II economic boom brought new opportunities for orchestral players, soloists, and free-lance musicians. As a result, a larger number of musicians now perform in the greater New York community, but they are subject to different and more selective criteria as well. This study attempts to document how clarinetists interact with and adapt to the changing needs of their profession.

The orchestra has served as an important medium of musical performance. The major orchestras at the end of the World Warm II were those in San Francisco, Chicago, St. Louis, New York, Boston, Detroit, Cleveland, and Cincinnati. When the United States economy expanded in the 1950s, there was

ample wealth to support performers such as Anthony Gigliotti and Stanley Drucker in orchestra careers that lasted for over forty years. It was a good career choice to become an orchestral player at the end of World War II and continues to be a good option. However, one now faces vigorous competition in order to become an orchestra member. Furthermore, the selection process for any member of an orchestra has become far more systematic than before. As Mr. Gigliotti recalled in the interview:

> The audition I had for the Philadelphia Orchestra with Eugene Ormandy in 1949 was very different from today's. It had no committee; one played only for the conductor. The audition I played for Ormandy in his Hotel, in December 1949, required not specific pieces, but all the possible ones in the repertoire. Ormandy just asked me the pieces on his mind and I played them for him from memory, such as the solo parts of the first and second movements of Symphony #6, and the Trio and Minuet of Symphony #8 by Beethoven; the *Fifth Symphony* of Tchaikovsky and so on and so on. I got the position and started working the very next week.

If we compare Mr. Gigliotti's experience to an audition today, we can observe some drastic changes. Now, hundreds of candidates may be auditioning. Opportunities are open to everybody, but only one person can finally obtain the position. In the past, the conductor alone could make his decision; now, auditions

for most major—or minor—full-time or part-time orchestras usually involve a committee of decision-makers.

Unlike Mr. Gigliotti, who was required to play whatever piece Eugene Ormandy had in mind at the moment, most players now have a list of music to prepare in advance. Although it may be difficult for the committee to make a decision when there are so many good candidates, the orchestra can certainly select the person best suited to its needs. It is obvious that orchestras are changing their selection criteria for members.

Among the many fine clarinetists who cannot obtain positions in today's orchestras, some become concert players or free-lance performers. Furthermore, since society seems to have more interest in music today, there are more competitions, more concerts with full attendance, more performers employed with full-time salaries, and more recordings sold than fifty years ago. Consequently, musicians do have greater opportunities than in previous decades to make a living by combining the diverse careers of a soloist, chamber player, and teacher. Since the 1980s, soloists such as Richard Stoltzman and Charles Neidich, neither of whom pursued a career as a member of an orchestra, have made a career out of performing, recording, and teaching music. The resulting variety of experience has precipitated the evolution of these clarinetists' personal musical styles. All musicians change the way they perform after leaving their mentors, but one who becomes an orchestral player may not change as much.

In addition, during the last fifteen years the world of music has also became

more open and interconnected because of the development of computer networking. Many young musicians now use computers to do research, to communicate with each other, and to exchange experiences and information. Together, the increase in competition, the growth in demand, and the expansion of computer networking are causing the musical field to evolve faster; the faster pace of this evolution, in turn, further opens up the musician's view of the world.

In the past, clarinetists seem to have been divided into jazz, classical, and commercial players, but more recently these styles seem be merging together. Audiences today are interested not only in classical music or Broadway shows, but instead enjoy all types of music. Consequently, musicians have the opportunity to explore non-traditional careers. For example, after Krakauer won the Naumburg Chamber Music Award, he decided not to concentrate on the standard classical repertoire. He chose to play contemporary music and Klezmer music. Naturally, Krakauer can still perform the standard classical repertoire masterfully, but he finds performing contemporary pieces to be more fulfilling. He originally became interested in Klezmer music in 1987. At first, he played it purely for personal pleasure, never thinking that it would become his career. He made his first Klezmer recording in September 1990. Mr. Krakauer put new chords and techniques into his Klezmer music playing. He also employed glissandi techniques, having been influenced by the jazz player Sydney Bechet, a great New Orleans jazz clarinetist and soprano saxophonist.

Sometimes the public's unexpected liking for a particular style of music,

such as Klezmer, can re-shape the entire career of a musician like Krakauer. At other times, the need to be distinctive, to be noticed by the public, will alter the way most clarinetists think about their music or ways to market it. When in the 1950s clarinetists were first discussing the possibility of playing Mozart's *Clarinet Concerto* with the basset clarinet, few musicians wanted to test the idea. However, today more and more clarinetists, such as Charles Neidich, David Shifrin, and Richard Stoltzman, are making recordings on this special instrument. These musicians are willing to experiment with this method at least partly because recordings made with a special instrument may sell better.

In fact, sometimes changes in the market can even force musicians to change their habits in non-musical matters. If a person goes to a record store today, he will find that the covers of new recordings are becoming ever more attractive. Beautiful pictures reflecting the performer's personal taste replace many traditional photos of a well-groomed musician in a "serious" suit or dress. While some people disapprove of these changes, musicians must be flexible to survive in today's ever-changing environment.

Many new ideas in clarinet performance, such as the emergence of Klezmer music or playing the Mozart *Clarinet Concerto* with an extended instrument, are relatively well received. However, many new ideas did not become popular. Mr. Portnoy once commented:

I think the only thing we went crazy with is *avant garde* music. Someone

sent me a tape of that kind of music and I could not understand the clarinet part at the end. It sounded like a gargle. When I read about it, I learned that the score indicates for the player to switch to a plastic bell and put the bell into water, then play the low E to make it gargle. I couldn't believe this! That means when you buy this music you should also buy the plastic bell. At another place you hold the clarinet up to the audience as if it were a telescope. These are all novelties I just can't understand.[8]

As Mr. Portnoy indicated, not everyone can accept certain new ideas in modern music. However, since different opinions about musical interpretation coexist at any given age, young players should at least be open-minded about experimental methods of playing the clarinet.

The new career opportunities and interpretive freedom that emerged in clarinet performance during the last fifty years have influenced clarinet pedagogy. In my opinion, a lesson to be learned from today's fast-changing world is that teachers should never keep students from learning new techniques. If our teachers never encouraged us to try multiphonics, vibrato, glissandi, or flutter-tonguing, we would probably have lost our place in contemporary music and the skill to teach the next generation of musicians. In any case, most competent teachers know that the process of teaching students is dynamic, not static. Mr. Krakauer described his experience in the interview as a student and a mentor:

[8]Said during interview.

When Mr. Russianoff taught me, he did not really tell me to open the lower back of my body or use the diaphragm to breathe. Although basically I still teach the method Russianoff taught me to my students, I have discovered and invented many techniques myself, some of which were created during the lessons I gave to students. The thing is, when you teach, students bring you their problems during classes and, as the teacher, you just suddenly improvise the method. That explains why when Mr. Russianoff published his book he collected all his students' notebooks. I also did that in response to the questions from students during lessons.

Krakauer also made the significant remark that "because the time changes, so does the technique." His comment shows that mentors should be sensitive to the changing nature of music while they are instructing students.

Finally, regardless of how the career opportunities available to a clarinetist change with time, and no matter how the trends in interpretive style fluctuate with public taste, a musician's foremost goal should always be to develop his or her own musical personality. History has demonstrated that the beautiful interpretation given in a successful performance will never be forgotten. Clarinetists have always been impressed by the wonderful sostentuto Louis Cahuzac played in the Nielsen Concerto. No matter how many incorrect notes he played during that performance, audiences still remember his music. Having an interesting musical

personality is the most important quality for a musician. When audiences hear a good performance, even when they do not necessarily agree with the interpretation, they can still recognize the personality of the musician immediately.

PART II: FUNDAMENTALS

The standard ways to breathe, tongue, or move one's fingers on the instrument have not changed from generation to generation. These fundamental techniques are unlikely to be modified in the future. Students must go through the basic physical training of holding their bodies and embouchures in the right position, and of breathing and tonguing correctly. They must also master essential techniques such as single-tonguing, double-tonguing, fast legato, and playing large intervals smoothly. Students at all levels must be aware of the importance of this fundamental physical training and these basic techniques. They should practice both, with professional guidance, in their daily exercises.

The process of playing the clarinet can be likened to the construction of a house. Regardless of how the shape and styles of the house change with time, the materials used to build the house—the cement, the brick, or the wood—stay the same. Only when students have mastered the fundamental aspects of playing the instrument will they be able to build upon this foundation and develop a truly interesting musical personality.

In the sections that follow, I investigate the fundamental training, and basic physical demands and techniques of playing the clarinet.

Chapter II: Preliminary Requirements for Being A Clarinetist

Most of the time, parents who care about their children's education would expect them to learn a musical instrument or participate in some other activities. Parents want their children to explore non-academic interests so that they can develop their talents. While not all children will become professional musicians, they all should receive correct instruction. It is even possible that some of these students will have the talent and chance to become a master who will be remembered throughout history. All parents want their children to have the most appropriate education. Since parents are not necessarily experts on music, they usually have many questions regarding musical education. For example: When should my children start to play an instrument? What instrument should they play? How should they start their music lessons? Is there any preliminary requirement for studying the clarinet? What is the definition of a talented student? What is the best age to begin studying the clarinet? What are the most important things that teachers should convey to beginning students? If the student plans to pursue a career as a professional clarinetist, how could he or she start? How can he or she excel in auditions and competitions?

In this Chapter, I discuss information gathered from experienced clarinet teachers. I hope both parent and student will come to know more about starting clarinet lessons and pursuing a career as a professional clarinetist after reading this chapter. Clarinetists can also compare the teaching and experiences recorded here with their own.

1. Is there any prerequisite for playing the clarinet?

One basic prerequisite for playing any wind instrument is having a good lung capacity.[9] Other requirements, such as good eyes, and good coordination between the eyes and fingers, are also important but not essential, as demonstrated by the fact that people who are blind can still become successful musicians. All of the clarinetists in my interviews excluded physical prerequisites, emphasizing instead the importance of "interest" and "desire." That is, there is not any strict physical requirement for being a clarinetist. Indeed, because of modern mechanics and special custom-designed instruments, even people with finger problems are often able to play. The only limitation would be severe physical disability which doctors could not treat and instrument makers could not accommodate.

Just as a desire to teach the clarinet is a prerequisite for becoming a clarinet teacher, the desire to play the instrument is essential for beginning students. Teachers have the responsibility to make the students' study interesting by showing them melodies they are capable of playing and by placing them in ensembles, bands, and orchestras where they will have the opportunity to play regularly with other beginners. No teacher or parent should give up on a student unless the student himself/herself loses interest. Rather than forcing the student to study, teachers and parents should let the student decide whether he or she has the interest and motivation to learn the clarinet. Students coerced into practicing the instrument will not concentrate on their studies, rendering practice time, however

[9]In general, a person who can breathe naturally is treated as having a good lung capacity.

long, useless. "Don't practice the wrong thing," according to Charles Neidich—good advice for both students and parents.

Neither disability nor the size of one's body will necessarily prevent a truly talented person from becoming a professional clarinetist. One of England's great clarinetists, Alan Hacker, is disabled below the waist, and the world's most famous clarinetists come in all shapes and sizes. There have been short players, such as Ralph McLane, and tall ones, such as Bonade (who measured 6'2" tall with a chest size of 48" or 50").[10] Gigliotti and Portnoy are big men, but Drucker, Opperman, Neidich, and Moses are rather small. There are also countless successful female clarinetists, including Sabine Meyer in Germany and Emma Johnson in London. There is no "right" size for a clarinetist; virtually any physical type will do.

For any student, exceptionally talented or not, the benefits of learning music are many. Because of the way their brains develop, students who enjoy music tend to be good at mathematics. Because music exposes students to harmony and melody, it helps them appreciate the beauty of life. It can also impart

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[10]Daniel Bonade was born in Geneva, Switzerland, of French parents but studied clarinet at the Paris Conservatory with M. Mimart, and studied privately with M. Henri Lefebvre. Bonade was a "second generation" of Cyrille Rose. As a student at the Paris Conservatoire, he had studied with Henri Lefebvre, whose teacher was Rose. M. Bonade won his first prize at the Paris Conservatory and came to San Francisco as solo clarinetist with the French Military band under the direction of M. Pares. Later he was offered the position of first clarinetist with the Philadelphia Symphony Orchestra, where he stayed for fifteen years. He then accepted an offer from Arthur Rodzinski to serve as first clarinetist in the Cleveland Symphony Orchestra, which he did for eight years. Upon retiring from this position, he toured South America under the baton of Arturo Toscanini and later become a member of the Columbia Broadcasting Symphony under Howard Barlow. Daniel Bonade has been associated with the Curtis Institute of Music in Philadelphia, the Cleveland Music Institute, the Mannes School of New York and the Juilliard School of Music, New York. His publication includes *Bonade Orchestral Studies for Clarinet* published by LeBlanc Educational Publications. Leblanc Educational Publications.

the value of self-discipline.

All musicians have individual characteristics and different physical limitations; clarinetists are no exception. Although there are various physical differences, such as the fastest tempos that can be achieved through tonguing and the structure of lips and teeth, any player who has hands big enough to cover the holes is capable of studying the clarinet. However, a person with larger hands may feel more comfortable playing the bass clarinet, while a person with smaller hands may find the E^{b} clarinet easier. But these diversities are not important until the later stages of a clarinetist's development. Moreover, those who cannot single tongue rapidly can compensate by practicing double-tonguing, and even crooked teeth and thicker lips can often be accommodated with different mouthpieces and embouchures.

Straightness of teeth and thinness of lips are always the first physical characteristics upon which young students are judged. However, as Mr. Portnoy said in the interview, "The physical questions involve looking at the fingers and the embouchure, but it is very hard to discover person's ability from the physical clues. You can look at the teeth and say, 'You have good teeth!' but that doesn't mean you will have a good embouchure. The strange thing is, when you put the mouthpiece on your lip, your tooth will automatically adjust for it." This explains why it is difficult to determine whether a person is well-suited to the instrument. The only thing we should consider is whether the person is adapted to music in general. As mentioned above, while certain personality types may affect the way

individuals perform music, there is no specific personality type that is particularly well-suited for playing the clarinet.

A very important capability to have when playing any wind instrument is good lung capacity and good control of breathing. Stamina is important, as is the ability to stand while playing, especially in recital or concerto performances. Even so, those who have a disability which prevents standing can often play effectively while seated.

Psychologically, players should have the ability to control their nerves, since a lack of such control will adversely affect their playing. Most great clarinetists, those who touch their audiences emotionally and develop a following, do so because in live performances they are physically open and relaxed, and fanciful and lyrical in their playing. Although on-stage performance is not the only way that music is presented, a person who is afraid of playing in front of people will have difficulty with this medium. (Of course, music can also be played on the street, in a park, or anywhere there is an audience to love it.) Since stage fright happens very often to the young player, overcoming it is essential for those who hope to have a successful career. (Please refer to *A Word about Stage Fright* in Chapter VI.)

2. *The Best Age To Start Clarinet Lessons*

The proper age to start clarinet lessons depends on the physical stature of the student. If a nine-year-old student has large enough fingers to cover the holes,

there is no reason not to start lessons; but if the student's fingers are smaller, he or she should start later. Ten or eleven is an ideal age to begin playing woodwind instruments such as the flute, recorder, and clarinet, and most students start clarinet lessons at those ages. Although some other instruments can be started earlier, students are not advised to start clarinet lessons before the age of eight. Children younger than eight seem not to have enough strength to support the clarinet (approximately one pound, twelve ounces) with a single thumb, and their fingers are usually too small to cover the holes. The young student of smaller stature who starts clarinet lessons too early may develop bad habits, such as placing the instrument on his knee or bending his embouchure to press the lower keys, like the lowest F. These incorrect motions will hurt the student's body, promote uncomfortable playing posture, and make it less likely that the student will enjoy playing the clarinet.

The great Czech teacher František Tadeuš Blatt (1793-1856) considers eleven, twelve, and thirteen to be the best starting ages.[11] Furthermore, dentists suggest that students not play any wind instrument before the age of thirteen because of the possibility of misshaping the teeth. Both these opinions help explain why students were traditionally discouraged from starting clarinet lessons too young. However, today's children often mature earlier, and today's manufacturers also produce lighter instruments, enabling teachers to pick models more suitable for young students interested in the clarinet.

[11] Méthode complète de Clarinette, Paris, 1843.

The clarinet is an instrument that a talented student can play at a professional level after five years of proper direction. For example, Stanley Drucker and Bernard Portnoy began playing at ten and thirteen respectively. Both started careers as professional clarinetists after only three to five years of study. Another example, Charles Neidich, started clarinet lessons at seven-and-a-half-years old—first with the E-flat, then the C, and finally the B-flat clarinet—and has achieved a successful career as a solo clarinetist. However, as stated above, starting lessons that early is not recommended in most cases. Mr. Neidich's circumstances were unique, in that his father, Irving Neidich, was a clarinetist and teacher and could give his son the best instruction every day. Furthermore, Charles had probably been listening to the clarinet tone since the day he was born.

The clarinet is sometimes too big even for a ten-year-old student, although most American schools begin teaching students how to play instruments around that age. It is important for beginners with smaller stature to be able to play the instrument comfortably. The student who has a smaller hand but is interested in the clarinet can begin with the E-flat clarinet, just as Charles Neidich did. Except for its size, the E-flat clarinet—called petite clarinette in France and clarinetto piccolo in Italy—differs very little from the B-flat clarinet. Though playing E-flat clarinet professionally is more difficult, because of problems in controlling tone color and pitch, playing the E-flat clarinet well can enhance a player's performance on the B-flat clarinet. Moreover, having the experience of controlling the tone colors of E-flat clarinet may give the student a more flexible control of air and

embouchure. As Mr. Cecil Forsyth wrote about the tone color of the E-flat clarinet:

> The great advantage of the E-flat clarinet is its distinctive tone-quality. This, especially in its upper register, is preternaturally hard and biting. . . . It is almost confined either to passage work of a hard mechanical kind, or to a special sort of mordant humor, such, for instance, as is found in Strauss's *Till Eulenspiegel*.[12]

In addition to the Eb clarinet, there are now student clarinets, such as the plastic C-clarinet, that are made for smaller hands.

Some students who start clarinet lessons young enough—between the ages of eight and ten—are able to avoid, under professional instruction, psychological obstacles to successful playing. A young person sometimes does not recognize the existence of difficulties that provoke excessive analysis on the part of older players. Where the older person ponders, the younger person just plays. If one loves music, one can study at any age, but if one wants to make a strong commitment to music as a profession, it helps to start young,

3. *Defining and Identifying Talent in a Student*

Talent is very difficult to define. Most of the time, the word is used to

[12]Orchestration, London, 1914, p. 229.

describe something that is 90% hard work and only 10% innate ability. It is also very hard to judge a student at the beginning of the studies. The teacher must take some time to determine how quickly the student can absorb and understand the ideas that are being taught. Usually, talented students will, within one year, jump noticeably ahead, enjoying their instrument while other students remain overwhelmed by technical problems. There are certain signs of talent to look for in a student. Some can be purely technical, such as a pronounced ability to control the instrument well, or a more capable handling of the high register or of tonguing. A teacher can often notice a difference in sound. While too much tension and the pressure of tonguing can cripple the sound of many young students, a talented student is able to overcome these obstacles. Talented students are often more flexible and quicker to absorb and follow instructions. The feeling for a phrase—or even a single note—can reveal a student's innate musical sensibility. A student who phrases artfully in the slow movement of Mozart's *Concerto*, for example, is demonstrating real musical talent—not only a talent for playing clarinet in particular, but perhaps for being a musician in general. Thus, technique and musicianship are the most important criteria for a teacher to use in evaluating a student's talent.

However, personality is also important. Playing clarinet, according to Anthony Gigliotti's father,[13] has much in common with the singing style called *bel*

[13]Anthony Gigliotti's father played in the theater of Philadelphia with Bonade, and studied with him. Later the elder Gigliotti became one of the clarinet teachers in the Philadelphia area.

canto,[14] which depends a great deal on natural mental and musical ability. Some people have an inborn aptitude for playing an instrument. In general, a talented student is very bright, very aware, very physically capable, very active, and open-eyed, and has few problems in school or at home. It would be difficult to evaluate the talent of someone who has trouble concentrating or has any physical problem related to studying.

4. *The Teacher's Responsibility*

It is very important for teachers to observe young beginners regularly as they develop. Teachers must have the time to watch them every week, something a frequently traveling soloist like Charles Neidich cannot do because his time is limited. As mentioned in Section 2, if a student is talented, it will sometimes take only three to five years to recognize the potential to develop a career as a professional clarinetist. But teachers, no matter where or when, as Paul Harris stated, "must help [their students] to develop their sense of artistry and musicianship."[15]

Because students today have so many different subjects to study and because the more talented students will tend to be interested in more subjects, it is sometimes hard for a teacher to keep a student's desire alive and focused on music. Strong motivation is as essential as pure talent for someone who hopes to become

[14]"Beautiful singing." This is an Italian vocal style used in the Venetian opera during the Baroque era.
[15]Teaching the clarinet, The Cambridge Companion to the Clarinet, Cambridge University Press, London, 1995, p. 123.

a professional clarinetist today. Mr. Opperman demonstrates the importance of motivation in his description of his famous pupil Richard Stoltzman: "The first time he came to a lesson, I didn't think he would become a great clarinetist (maybe 'good,' but not 'great'). Apparently I was wrong. Because at that time I did not know he was so ambitious about playing clarinet, and that finally made him successful." Teachers can try different methods to stimulate a student to practice. For example, it is good to have young students work together, because children always enjoy playing with others. Options for playing together include bands, orchestras, and chamber music ensembles. Such groups also help teach the importance of accommodating to others in performing music.

- As mentioned above, there are few, even among those quick-response students, who will become clarinetists in the future. Active students are always interested in many things and will often stop playing clarinet when they find new interests. They may sometimes continue playing the clarinet but treat the instrument more as a hobby than a passion. This means there is often only a very short period, at the beginning of a student's studies, during which the teacher can capture the student's interest.

Therefore, when a student comes to a teacher and shows interest in the clarinet, the teacher should first tell the student to enjoy playing. Only if the student takes pleasure in the instrument will there be some possibility of going further. In the beginning, it is important to determine how long the student will able to continue studying the instrument and progress in that period of time.

Later, it is most important that the teacher and parents not push the student into a musical career unless the student chooses that path. This is especially important because the student who decides to make a career in music is entering a world that is highly competitive.

Whether or not a student finally becomes a professional, the teacher still has a responsibility to assist as much as possible. As Mr. Opperman said of teaching Richard Stoltzman:

> He [Stoltzman] studied with me during his years at Yale. He had a big ambition to play clarinet. I changed the embouchure for him. His hands were like a farmer's, very rough, but he could play. I changed his equipment completely, including the tone holes of the instrument, and his reed; and I made him a mouthpiece and barrel, just as in nineteenth century all the teachers made the mouthpiece and reed for their students.[16]

If by the age of nineteen or twenty a student has problems of rhythm or musical sense, but also has very good technical ability, the teacher should try to "liberate his inner musicianship."[17] By studying more music theory, such as harmony, performance practice, or musical analysis, students will gradually develop the musicianship needed to continue their musical careers. On the other

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[16]Said during interview.
[17]Said by David Krakauer, during interview.

hand, sometimes people with significant and persistent troubles remain determined to become professional clarinetists. If those people come to the field with a great commitment to playing and have the personality to negotiate with people or know the music business well, there is still the possibility that they can find a position in this highly competitive music world. Moreover, being a musician is a lifelong challenge, as Mr. Gigliotti's father said:

> A student who has the desire and is not limited in time for practicing will become a clarinetist. As long as the student has the desire, he can really compete with professional players. Even if the student has no talent at all, he can still play it well and find his career.[18]

5. *Professional Positions for Clarinetists*

There are many different kinds of positions for clarinetists. A clarinetist may be a college teacher, a professional player in New York, in a major orchestra, or in an orchestra in a small city. Some of these positions require different backgrounds. For example, an orchestral player must know how to interpret many excerpts perfectly; a teacher in high school or even junior high school must know the best way to communicate with students; a band director or conductor (one of the most common positions for clarinetists) must be acquainted with a diversity of band music as well as with the components of a band; and a reed doubler must play

[18]Mentioned in the interview.

flute, piccolo, and saxophone as well.

If a person does want to become a professional clarinetist, it is always helpful to have a career plan. Realistically, however, it is difficult for a young child, or even an adult, to determine the best option, since there are many different positions for clarinetists. The suitability of any one position depends on the nature and strength of one's ability and the overall level of competition from other clarinetists. For example, there are over two thousand clarinetists listed in the directory of Local 802, the New York City branch of the American Federation of Musicians (the musicians' union), but only 10 percent of them play professionally. The rest may teach the instrument or play the clarinet for a hobby. Of course teachers also have a vital professional responsibility, helping guide students into clarinet careers.

In addition to coping with the competition, individuals must realistically assess their own abilities for acquiring different positions. As discussed earlier, some clarinetists may have small hands, some large; some can tongue faster than others. No two soloists are going to produce identical performances, even when playing the same piece. Because pieces are not written for only one person, performers will play them in varied ways. The important question is: What does each performer bring to the piece? Some have different ideas to communicate and do so through unique, cohesive performances. As Stanley Drucker explained: "A musician should perform like a magician, not exposing his tricks, but with the result that the image just has to be there!" Of course difficult pieces make special

demands on the technique and rhythm of the performer, making them a greater challenge to master. But no matter how clarinetists modify music to suite their different images, the performances must be well done. Therefore, teachers must help students realize their potential abilities, so they can perform like magicians as well as musicians.

In the past, great musicians who performed music beautifully did not have to hold any degree or diploma. For example, Stanley Drucker did not get his high school diploma, dropping out to take an orchestral job. For Mr. Drucker and many other clarinetists it was the right choice to make. But the world has changed significantly and today's clarinetist faces much stronger competition. Charles Neidich said that a few of his excellent students could not find orchestral positions because of limited openings, so some of them went back to school for higher degrees, in order to qualify for college teaching positions. For clarinetists and other wind players there are never enough orchestral spaces; the quantity of wind positions available will never be as great as the quantity of string positions available for aspiring violinists.[19] This unfortunate circumstance has two consequences. The first is that a smaller proportion of clarinetists become professional musicians. The second is that numerous high school, junior high, or even elementary school music teachers are highly qualified musicians. Both of these consequences may contribute to an increase in the popularity of music in

[19]In a professional orchestra today, there are usually four players in each woodwind section, i.e., four flutes, four oboes, four bassoon, and four clarinets. The numbers of violin players are much more than that.

general. With exceptional musicians performing professionally, and highly skilled musicians teaching in schools, children are more likely to come in contact with music in a very positive way, even if they have little or no interest in becoming musicians themselves.

If the student really loves music, he or she will eventually find ways to survive in the field. As mentioned above, there are more options available today for aspiring clarinetists than there were in the past. These options include, but are not limited to, computer music, concerts over the Internet, and even new-business ventures. These various new positions open our communities and environment in a more active way to the enrichment of music.

6. *Standards for Judging a Clarinetist in an Audition or Competition*

According to all the clarinetists I interviewed, "musicianship" is the most important standard by which to judge a clarinetist in an audition or competition. A player with a good understanding of phrasing and articulation, and who has strong rhythm, is likely to win praise. Because phrasing is the same on different instruments, good musicianship is evident even to judges of different instrumental backgrounds. Though technique is important, it is not the primary quality looked for by the clarinetists I interviewed. In addition to executing the piece cleanly from beginning to end, a performer should demonstrate that he or she has something to say, something that reveals what is inside him or her. Especially in competitions, judges will look beyond cuteness or sweetness in appearance, seeking instead to

determine how sincere the performer is about playing music. In other words, the judge always looks for something unique and interesting musically. Although perfection in technique is important, something artistic and striking in the depth of the music is still the chief prerequisite for becoming a master. Judges recognize and appreciate the qualities of an exceptional performance, so the winner of competitions is frequently the person who plays with musicality, lyricism, passion, sensuousness, or brilliance beyond the normal standard. Conversely, the person who plays with bad intonation, bad rhythm, and a bad sense of phrasing will almost surely be eliminated. As Stanley Drucker said in the interview, "If the player did not master the instrument, or if it is out of tune, or if any body or facial movement distracts the judge's attention from the music, this player will be dropped because he will also distract the attention of audiences."

In school auditions the requirements are certainly different from those in competitions. As Charles Neidich said in the interview, "I will look at the potential of this person. How does this person fit at a certain level and how can I help to evolve his talent?" Because schools have a responsibility to cultivate students in search of musical careers, they will provide some opportunities for those students who are talented but not yet exceptional performers. As a result, standards tend to be higher for competitions and non-school auditions than they are for school auditions. For the orchestral audition, David Krakauer described his philosophy of evaluation in this way:

My criterion for judging an orchestral audition or a competition is to put myself in the place of an audience member when listening to the music. A player should please himself as well as the audience. Audiences want to have beautiful music, to be excited, to be challenged, to be carried away, and to have their minds working.[20]

In a school audition, the standard is therefore a little more flexible. If everybody plays the same piece, then it is easier to judge. But if one person performs a piece the judge loves, and the next performs equally well, or even better, on a piece the judge does not like, the final judgment may often seem unfair. Therefore, in competition everybody plays the same piece. The judge expects the different competitors to play at different tempos or to enunciate phrases differently, and the judge will infer meaning from such variations. Sometimes even one phrase or note can reveal the inner quality of the auditioning musician. As. Jay Light[21] stated: "A musician can take the dots on the page and turn them into a meaningful realization of the composer's aesthetic, emotional or

[20]Said in the interview.

[21]Jay Light, professor of wind instruments, joined the Drake faculty in 1972, teaching oboe and bassoon. He graduated from the Curtis Institute of Music in 1963 as an oboist, where he was a student of John deLancie. He studied bassoon with John Shamlian, the Philadelphia Orchestra. He also holds a master of music degree from Michigan State University. Mr. Light was principal oboist of the Philadelphia Lyric and Grand Opera Companies, L'Orchestre Symphonique de Quebec, and the Aspen Festival Orchestra. He performed in orchestras under such well-known conductors as Eugene Ormandy, Georg Solti, Zubin Mehta, and others. Mr. Light is the author of The Oboe Reed Book, A Straight-talking Guide to Making and Understanding Oboe Reeds, published in 1983. His newest book, Essays for Oboists, More "Straight Talk", was published in the summer of 1994. Mr. Light served as Chairman of the Music Department at Drake University from 1987 to 1993.

dramatic intent."[22]

[22]Essays for Oboists, Alborada Publications, 1994, p. 79.

Chapter III: Some Basic Physical Facts About Playing the Clarinet

When students first learn the clarinet, teachers tell them: "Hold your body naturally, without tension; keep your fingers close to the keys; do not lift the instrument; do not bite the mouthpiece; hold the clarinet at a natural angle, not too high and not too low." These basic instructions are fundamental to clarinet playing. However, beginners often misunderstand "naturally" to mean "sloppy," "tension" to mean "force," and "not lift" and "not bite" to mean "loose." Although it is true that young students can use their own imaginations to play the instrument in ways they like, teachers must be ready to make corrective instruction to keep them moving in the right direction. Beginners often make the following errors, to which good teachers are alert: they blow their cheeks out; wobble the clarinet in their lips; show insufficient force in breathing; put the mouthpiece too far into their mouths; place the tongue at the roof of the mouth to the back of the top teeth; use the tips of their fingers to cover the holes; cover only the hole but not the entire ring; and support the instrument with extra fingers. Good instruction from a teacher will help the student avoid basic errors in form and technique that can be time consuming to change later on. Fundamentally, a teacher's responsibility is to help students play the clarinet with the correct position.

1. *Breathing: Inhalation, Exhalation, and How to Practice It*

Gigliotti gives a colorful description of how rarely Americans practice correct breathing: "In general, in America approximately 88% of the population

breathes incorrectly, without using the diaphragm, and another 10% are probably babies excludes people whose profession requires diaphragm-breathing."[23]

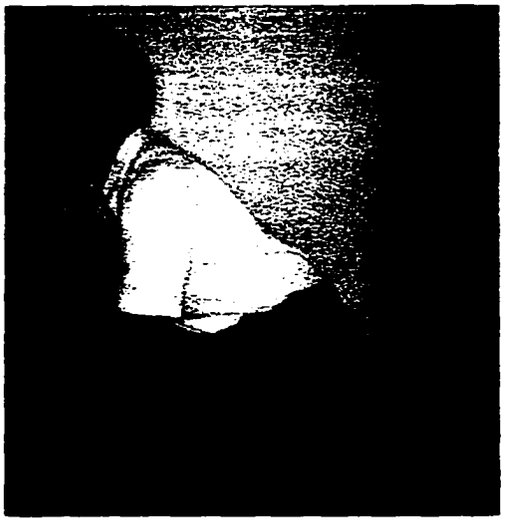
In fact, because the diaphragm muscle itself is not controlled by a player's brain, players never really understand the function of the diaphragm in respiration. The diaphragm is a muscle, attached to the body at the bottom of the rib cage, that moves downward to draw air into the lungs. When a player blows air into the instrument, the abdominal muscles push up the diaphragm. This is what wind-instrument players and singers mean when they refer to "diaphragmatic-breathing." The diaphragm is not a muscle that players can control as they can the arms, hands, or the face muscles that are involved in the embouchure. Singers usually employ diaphragmatic breathing to influence the quality of their voices more directly. Therefore, using the breathing methods of singers can also be good practice for wind players, who will find that it is easier to employ diaphragm-breathing if they have learned singing beforehand.

Whether standing or sitting, players should maintain a natural position with the spine straight. This is the primary requirement for effective breathing. When one takes a deep breath, the diaphragm is depressed, going down as the lungs are extended with air. The most common method of practicing diaphragm breathing is to lie down on one's back on a hard, flat surface and to put either one or both hands on one's stomach. Then, when one draws a relaxed breath, one will feel

[23]Said during interview.
A baby uses diaphragm-breathing naturally.

one's hands move up and down. In contrast, so-called chest breathing will not produce such a motion and is considered incorrect for a wind player. When one takes a breath by lowering the diaphragm, one's lungs will expand to inhale the air. In order to help the student practice diaphragm breathing correctly, a teacher can have the student put his or her hands at the sides of the lower ribs. When the student takes a deep breath slowly, it is possible to feel with his or her own hands how the air gradually fills the body. First it fills the sides, then the abdomen, and finally, a little of the chest. The other way to practice breathing suggested by Gigliotti is, "to have the student sit on a chair, clasp his hands, and cross all his fingers together. Then have him place his elbows against the top of his legs while leaning his body forward at a 45-degree angle."[24] (See below, Illustration 1.)

Illustration 1. The Way To Test A Deep Breath, by Anthony Gigliotti.



[24] Said during interview, demonstrated by the author.

The teacher can now lay his or her hands at the sides of the student's body and ask him or her to take a deep breath slowly. The student can feel the up and down motion of the teacher's hands while he or she is breathing. This breathing process will make more sense if the teacher demonstrates it in this manner. Another way to demonstrate diaphragm breathing is to have the student hold the breath after inhaling. By filling the lungs with air through diaphragm breathing, the player takes full advantage of the full lung capacity while remaining completely relaxed. In addition to relaxing the player, diaphragm-breathing gives more support to one's sound than shallow-breathing (chest-breathing). Clarinetists should strive to breathe as deeply as possible.

- Oboist Jay Light described one way to practice breathing that has worked successfully for all wind instrumentalists:

> Lie on your back on the floor. Don't use the bed because you can cheat on a too-soft surface. Put a book (a large book, for example, or a single [clarinet] case) on your lower abdomen and do 'push-ups' by breathing in and out using your abdominal muscles. At this stage, the weight is mostly so you can see that it (the breathing) is happening correctly....First, do it slowly, with long, extended in-and-exhalation. Then, practice inhaling quickly enough to make the weight bounce.[25]

[25] Essays for Oboists, Alborada Publications, Des Moines, 1994, pp. 26-7.

David Krakauer states that, in addition, "one should think of the lungs as being very long. They come almost up to the top of the chest, and reach all the way down to just the bottom of the diaphragm."[26] Both statements underline the importance of filling up the lungs as quickly and completely as possible while playing. A full capacity of air will produce the best tone quality. Furthermore, the importance of full inhalation applies to almost every breath, especially during fast passages, where the chances to take a breath are shorter and rarer.

Practicing deep breathing is the same as practicing full inhalation and exhalation. In the beginning, one should take a series of breaths, stopping after each one and then inhaling again and again until one has reached the real capacity of lungs. Gradually, a player will learn to take in the real capacity in one brief inhalation. Although starting one's breath in the chest is not suggested, use of the chest is actually necessary for achieving a full capacity of air and should be used after the diaphragm has been completely filled. All space must be filled up, from the bottom to the top, including the sides and the chest. Because using one's full breath capacity will always make the clarinet tone sound better, it is important that one fully inhale, whether the opportunity to breathe is short or lengthy.

In order to breathe at full capacity while playing, the clarinetist must have relaxed muscles and must also be aware of the best places to take a breath. Especially during concerts, players will often feel excited or nervous. As a result, they may unintentionally shorten their phrases in ways that harm their performance.

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[26] Said during interview.

In such a circumstance, it is often helpful if the player has marked all of the breathing signs and tested them carefully beforehand. During the process of performance, Alan Sigel suggests: "When beginning a movement, rapidly inhale and exhale several times before playing. This 'hyperventilation' tends to give the player a 'fresh feeling' and enables him to play longer without getting out of breath or feeling 'breath fatigue.'"[27]

2. *Tonguing: The Tongue Position in the Mouth and on the Reed*

For the first hundred years of the clarinet reed's existence, it was placed on top of the mouthpiece, in contact with the lip. It was not until the nineteenth century that Frederic Berr and Iwan Müller successfully argued for moving the reed underneath, securing the benefits of direct contact with the tongue.[28] Putting the reed underneath resulted in clearer articulation by giving players the ability to start and stop the vibration of the reed instantly. Eventually the new reed

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[27] The Twentieth Century Clarinetist: Advanced Studies In Contemporary Music For Clarinet, F. Colombo, 1966, p.48.
'Breath fatigue' is the feeling of gradually increasing lung pressure that wind players experience when playing steadily for several minutes with little or no time to rest.

[28] Frederic Berr (1794-1838), born in Mannheim and died in Paris, can perhaps be considered the founder of the French School of clarinet playing. He was professor at the Paris Conservatoire from 1831 to 1838.
Iwan Müller (1786-1854) was a Parisian, specialized in basset horn solos, and won much praise. Müller submitted his newly invented thirteen-keyed instrument, which he called *clarinette omnitonique* (all-tonic clarinet), to the jury of the Conservatoire of Paris in 1812. This instrument had been rejected by Xavier Lefèvre (1763-1829), who had added a sixth key to the standard five-keyed clarinet and insisted that the clarinet should not have, as did Müller's, only one single B-flat pitch to play all music. However, Müller's clarinet somehow showed the direction on important section of clarinet design at the present time, the German clarinet, is founded directly upon his work. This instrument received compositions dedicated by Riotte (1809), Reicha (1815), and Abraham Schneider (1809). The leading teacher and clarinetist at that period, Frederic Berr, was an early to convert to his improvement.

placement became nearly universal.

Tonguing is the mode of articulation for wind instruments, just as bowing is the mode for violinists and plucking or strumming the mode of guitarists. The tongue position on the reed influences the speed and quality of articulation, while the tongue position in the mouth affects the quality of a clarinet tone. The tongue should never be slack in the mouth. One should lift the tongue to somewhere between the back two teeth, or molars. The tongue should always be in the shape it would form while enunciating the syllable "Yu," and it should be kept forward and up front. In this position the tongue will accommodate the forward motion of air that occurs when the player blows into the clarinet. The tongue position on the reed is much easier to achieve than the tongue position in the mouth. The tongue is usually placed a bit below the tip of the reed, and players must keep the tongue a little bit forward in order to touch the reed. On faster detached-note passages, the player can tongue closer to the tip of the reed, while on other kinds of passages he or she can tongue less closely.

Charles Neidich mentioned, "I tongue 'a little below' the tip point because I feel the tip of the reed is too soft to be attacked. To tongue more below the tip of the reed can move your tongue faster and achieve a better tone without 'cutting' the tip of the reed."[29] In Mr. Neidich's opinion, the air should always be moving forward, lifting the back of the tongue higher. This combination forms the syllable "hee" for one's embouchure while playing. In Chapter IV there is further

[29] Said during interview.

discussion of the position of the tongue on the reed.

3. *The Position of the Fingers, Hands, Arms, and Body.*

When the student places his or her fingers on the clarinet for the first time, the teacher should be sure that the rings and the holes of the clarinet are covered completely. While playing, the student must cover the entire ring and hole with the pad, rather than the tip, of the finger. This technique prevents the air leak that would otherwise influence the tone of the note and perhaps prevent its being sounded at all. The most important part of fingering is the position of the two little fingers: the right little finger on the F/C key and the left little finger on the E/B key. These two fingerings require the player to stretch each of the two little finger of each hand to control four keys at each side of the clarinet. Young students with smaller hands are forced to curve their arms and elbows to reach these distant keys. As a result a student's technique may be impaired, making it difficult to play fast passages evenly or a group of detached notes cleanly. Furthermore, a student may be unable to produce a flexible tone color because of the muscular tension. The way to correct this problem is to begin with slower tempos and to gradually work up to speed. In addition, students can play all legato and detached notes by placing their two little fingers in the positions mentioned above; that is, instead of pressing the keys, they can lightly place the right little finger on the F/C key and the left little finger on the E/B key. By placing these two fingers on the keys while practicing, the student can eventually

develop an expandable and supportable finger motion.

Different body types dictate hand and arm positions. Positions will be very different for a person with long arms than those for a person with short arms. In general, one should achieve as natural and relaxed a position as possible. One exercise that can be used to teach appropriate positions to young students does not involve the clarinet at all. The teacher can ask students to stand up with their arms down at their sides. Then the teacher can ask them to raise their hands in front of them, and show them where they would be placed if they were holding a clarinet.

In my experience it is good to have young players stand, because when they sit they will often slouch in the chair and put the clarinet on one or both knees. This bad posture will foster muscle tension, which is disadvantageous for playing. If for some reason the student must sit down, then he or she must sit away from the back of the chair and move the body slightly forward, putting the elbows slightly away from the sides, and keeping the feet uncrossed. This shape will provide the most open position for respiration. It is also important that young students not practice clarinet when they are overly tired. Sometimes it is best for a tired student to stop practicing and wait until being completely refreshed. It is useless to practice when one is unable to pay attention.

The key words for good hand-arm position are "natural," "comfort," and "relax," as can be verified by these descriptions of the hand position: Alan Kay says it should be "just like holding a drinking glass. It is very relaxed, and you have the

freedom of your fingers."[30] As Gigliotti said in the interview: "My father used to tell students first to face a table to put their right hand down on it, then lift the arm and turn it, curving the fingers as if they were going to pick up a ball. That is the position for your right hand [shown on the next page, Illustration 2]." It is also beneficial if the left hand is in the shape of a hand holding a drinking glass, with a gentle curve and no excessive pressure on any one key. (Young students sometimes curve the index finger of their right hands, jamming the side key; in this case teachers simply have to relax the student's fingers and fix the position.)

Arms and elbows should hang at the sides of the body. If one is holding the arms and elbows either far away from or too close to the body, then too much tension is created. At the same time, players should not be overly restrained from moving their bodies, since body language is certainly necessary and can demonstrate how the player is relating to the music. In fact, body movement sometimes becomes a part of the performance itself. As long as the motion is natural, and as long as it does not adversely influence the tone or pitch of the clarinet, it is considered correct and appropriate.

For clarinet players the thumb position is equally important in playing clarinet. If the thumb-rest of a clarinet is too high, the player may have trouble reaching the lower keys or balancing the fingers while playing.[31] If the thumb-rest is too low, the thumb will be forced to curve, and the resulting curved

[30]Said during interview.

[31]The thumb-rest is a small piece of metal that locates on the back of the lower joint of clarinet. Clarinetists place their right hand's thumb under the thumb rest in order to support the entire instrument.

Illustration 2. The two-step practice of holding clarinet, by Anthony Gigliotti.

thumb will create a tension that can affect the player's muscles. The consequent strained position will create an intolerable bending of the clarinetist's hands. Although the position of the thumb-rest is important, manufacturers often put it in the wrong place, potentially causing damage to the player's hands. In general, when one holds a clarinet, the thumb and index fingers of the right hand should be opposite to each other. In other words, the bottom of the thumb-rest should be opposite the center of the first ring at the lower joint. (As mentioned above, another way to test the position of the thumb-rest is to hold the clarinet as if it were a drinking glass.) Most clarinetists whom I have interviewed frequently have their students reposition the thumb-rest, particularly in the case of younger students, especially those who have started the instrument at ten years old or younger. These young students are rarely strong enough to support the instrument with only a single thumb. If these students are not carefully watched, incorrect positioning could damage their thumbs and various other parts of their hand, possibly leading them to give up playing the instrument altogether. Clarinet manufacturers usually make some professional or intermediate level clarinets with adjustable thumb-rests, but this feature is not provided on student-level models. This is a serious problem that all manufacturers should solve. My suggestion would be that all models of clarinets be made with adjustable thumb-rests; or, as Mr. Moses suggested: "provide something that could relieve the tension and stress to thumb and arm—for example, a neck-strap." There are student-level clarinets by Selmer, GL300 with 0.590" molded bore, 1400 with 0.590" and 1401 with

0.577" molded bore. Although all made of plastic, they do have fixed thumb-rests. For young beginners, a light plastic instrument in the keys of B-flat or C with an adjustable thumb-rest would certainly make playing easier. It would also help these students to enjoy playing clarinet more.

There are two types of finger motions prescribed for the clarinet. In one style, the player strikes the holes with the fingers, keeping them stiff and heavy, lifting them and coming down hard. As taught by the traditional German school and demonstrated by the great player Simeon Bellison's trademark "Stiff Fingers," this style creates a certain amount of tension in a player's muscles.[32] (One of Mr. Bellison's pupils, Mr. Kalmen Opperman, denied that his teacher played with stiff fingers. He felt that while Mr. Bellison's finger motions might have been heavier than those of others, they were nevertheless not excessively heavy.)

In the other style, as practiced by Mr. Gigliotti and his teacher, Daniel Bonade, of the French school, the player presses the keys lightly instead of striking them. When players press the tone holes lightly, they gain the flexibility to play more rapidly with a smooth and lyrical feeling. As Leon Russianoff wrote, "Fingers now were feather light—floating high up, and gentle down—weightless and noiseless."[33] Since the 1920s, the French school has had a major impact on American clarinetists' style of playing. One of the most important influences has been the great teacher Bonade. The French school clarinetists play more gently

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[32]See also Leon Russianoff: *Confessions of a Clarinet Teacher*, The Clarinet, August 1974, p. 7.

[33]The Clarinet, August 1974, p. 7.

and lyrically, without the "popped note" style of the German school. The French school favors a quick-response reed and mouthpiece, as well as a quick-response barrel, ligature, and instrument; all of which were developed for and unique to the French style (please also refer to "single-lip embouchure" in the next section).

4. *Single-lip Embouchure*

Embouchure is the shape of the lips and surrounding facial muscles required to blow air into the mouthpiece. Most players today use the single-lip embouchure, holding the mouthpiece by the upper teeth and lower lip. In the single-lip embouchure, the lower lip is the main agent for producing sound. Making the lip accommodate the mouthpiece is a process that takes several years.

Embouchure is the most difficult thing for teachers to describe to students because everyone's mouth is unique and has its own muscles, creating for each person a different embouchure. Clarinetists have to spend years finding the most comfortable and proper way of placing their embouchure. Hence it is hard to find agreement on the proper embouchure.

There are two main functions of the lips when one is playing clarinet. The first is to hold the mouthpiece and project the air while preventing it from leaking; the second, to adjust the position of the mouth on the reed by use of the lower lip. Neither lip needs to "bite" the mouthpiece or reed. As clarified by Jay Light, "Lips do not make the reed vibrate. Air makes the reed vibrate. Lips inhibit the vibration, particularly when they are too tight. . . . Blow with your wind, not with

your embouchure; and tongue with your tongue, not with your wind."[34] This passage gives the impression that the embouchure serves as a medium between the body and one's instrument. As a student of Joseph Allard, John Moses recalled his teacher saying, "A blower is not a player."[35]

There are two general schools or proponents of single embouchure. The German school prescribes tight lips and tense muscles at the sides of the player's mouth, creating the syllable "ooh." Though the resultant sound quality is firm, it is not very flexible. The French school instructs clarinetists to let their lower lips relax around the lower teeth, creating the syllable "ou." This enables the player's lower lip to control the pressure on the reed, creating different colors of tone and making the sound quality more flexible. In the French school, the sides of the player's mouth are used only to seal the mouthpiece to prevent air leaks. It does not matter whether or not the side muscles are pushed in.

The differences between the embouchures of the German and French schools are partially the result of differences between the reeds each uses. The German school's reeds are hand-made by clarinetists themselves, and so each one is unique. German players tie the reed on their mouthpiece with a cord. In contrast, French players use a ligature.[36] One consequence of this difference is that it is often more difficult and time-consuming for German-school players to stop and start tones abruptly. The thin reed of the French school creates a tone of

[34]Essays for Oboists, Alborada Publications, 1994, p. 4 and p. 61.
[35]Said during interview.
[36]Ligature is a material that keeps a reed on the mouthpiece. There is more discussion on ligature in the third section of Chapter V in this dissertation.

sensitivity, incredible immediacy, and brightness, while the reed of the German school, applied to a bigger bore instrument, tends to make the tone darker and offers much greater resistance. These differences help explain why the German-school embouchure is tighter than the French style.

As mentioned above, each clarinetist's embouchure is unique because of the unique muscles and mouth of each player. Some embouchures are neither German- nor French-school, but are instead conceived by the players themselves. One of the clarinetists I interviewed, David Krakauer, has described his ideal embouchure in this way:

- The embouchure should be strong, not be pinched or tight, but 'taut.' That means you will have strength on the corner muscle. Otherwise the sound will be too loose. The syllable of embouchure I taught my students is neither 'EE' nor 'OH' but more like a 'Yueh.' One important thing Mr. Russianoff described is that the skin under the lower lip has a certain tension, like a drum. The corner muscle of the mouth must be strong, matched in tension with the lower skin.[37]

Charles Neidich also gives unique instruction. He believes that, while still refraining from biting, the player should keep the lower lip especially firm and strong against the reed, providing a certain pressure.

[37] Said during interview.

However, most players still prefer a more natural embouchure, such as the one prescribed by the French school, because it produces a more flexible sound that fits today's needs. In practicing French-school embouchure, one places the clarinet in the mouth just like a baby places its thumb for sucking, with the player's lower lip resting against the lower teeth naturally. One need not seal the mouth from the corner or force a smile on the muscles unnecessarily. It is also not necessary for a player to keep his or her chin flat, because the chin will automatically descend along with the lower lip.

There are many different ways to place an embouchure. The following two methods, from Mitchell Lurie and Alan Kay, differ in shape but are similar in that they prevent a pinching of the lip. [38]

Mitchell Lurie, in 1959:

1. The corners of the embouchure are pulled back as in a smile.
2. The center of the embouchure is firm, without pinching or biting. [39]

Alan Kay, 1997, during interview:

1. Find the position for your upper teeth; the proper place for the teeth is

[38]Mitchell Lurie graduated from Curtis Institute of Music, where he studied with Daniel Bonade, Marcel Tabuteau, and Fritz Reiner. He has been solo clarinetist with the Pittsburgh and Chicago Symphony Orchestras. Since 1954 he has been a free-lance player for commercial and film studios. He taught clarinet and headed the woodwind ensemble department at the University of Southern California. In addition, he headed ML Mouthpieces, where he engaged in the production of clarinet mouthpieces.

[39]Woodwind World, September 15, 1959, p. 6.

located between one-third to one-half down the facing of the mouthpiece, depending on the length of the mouthpiece.

2. Firm your lower lip on the reed; the proper place for the lower lip is located between one-third to two-thirds down on the reed.
3. Seal the corner of your mouth.
4. Blow air to produce a sound.

For the young beginner, finding a proper embouchure is very important and also quite difficult. Teachers must vary different models to fit individual situations. It is true that in today's musical world numerous tone qualities are required for the clarinetist's repertoire, and players have to create their own characteristic modes of playing. But whatever the individual's technique, it must produce a muscular and dominating tone quality. And no matter how many different ideas clarinetists have for the embouchure, there is at least one thing they might all agree upon. As Frederick Thurston recommended in 1964, "Make sure the clarinet goes to you, and not you to the clarinet."[40]

5. *Comparison between The Single- and Double-lip Embouchures*

Double-lip embouchure is defined as the clarinetist holding the mouthpiece by both the upper and lower lips. One of the reasons that players in the early days employed the double-lip embouchure was that the mouthpiece was made of wood

[40]Clarinet Technique, Oxford University Press, London, 1964, p. 3.

that was easily damaged by the teeth. In the 1870s, wood was replaced by ebonite, a stronger material that allowed clarinetists to hold the mouthpiece with their teeth without fear of hurting the upper lip. Thereafter, the employment of single-lip embouchure became popular. Frederic Berr, who was succeeded by H. E. Klosé at the Paris Conservatoire in 1838, was one of the first to insist that his pupils play with the reed upon the lower lip.[41] Carl Baermann also adopted the single-lip embouchure in the same period.[42] Following the success of these great teachers, many more clarinetists switched from the double-lip to the single-lip embouchure.

Because it is more comfortable than the double-lip method, most players today are taught single-lip embouchure. However, many Italian and a few French players still prefer the double-lip embouchure. In fact, both single- and double-lip embouchures can produce a beautiful tone if developed thoroughly. For example, McLane played with double-lip embouchure; McGinnis single; Portnoy single;

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[41]Hyacinthe Eléonor Klosé was born on 11 October 1808, on the Isle of Corfu. He studied with the famous clarinetist Frederic Berr. On the death of his master, he took his place as professor at the Paris Conservatoire. He retired in 1868 and died in Paris on 29 August 1880.
Klosé was not only excellent clarinetist but also a very worthy composer, who was a completely trained musician with good piano skills, well trained ears, a good sense of rhythm, a thorough background in harmony and a clear sense of music history. He devoted all his time on teaching numerous pupils and the work connected with that task. He wrote an excellent clarinet tutor which is still in use, many etudes and solo pieces. Klosé earned for himself a place in the history of clarinet by the application of Boehm's ring-key. The construction of this instrument remains almost unchanged to this day and satisfies the demands of professional musicians of many countries, and has also given important stimuli to the German clarinet system.

[42]Son of Henrich Baermann, Carl (1810-1885) was also a composer. His five part Method for Clarinet, is still in print in various editions, which are called *The Virtuoso Clarinetist* and *The Art of Clarinet*. Baermann's method is progressive, and parts four and five are extremely demanding both musically and technically.

Opperman double; Reginald Kell[43] double; Benny Goodman double for about the last three decades in his life; and Richard Stoltzman, double. Gigliotti plays with a single embouchure, while at the same time employing a concept similar to the double-lip embouchure. When Gigliotti, who spent his whole career as first chair in the Philadelphia Orchestra, plays clarinet, he rests the bell on top of his right leg and holds the mouthpiece with both lips. Because the bell rests on his leg, he does not need to push and bite the mouthpiece with his upper teeth. While his is technically a single-lip embouchure, it employs the technique of a double-lip method.

The advantage of using the double-lip embouchure is that the player does not have the vibration in the mouth that is caused in the single-lip embouchure by the biting teeth, which can influence his or her hearing while playing. Putting a rubber patch on top of the mouthpiece can reduce the vibrations of a single-lip embouchure. The patch also makes the upper teeth more secure and comfortable, but it can not replace the function of double-lip embouchure, because the patch is not as controllable as the lip. While playing a correct double-lip embouchure, the upper lip is extended just far enough to cover the upper teeth, but this can vary somewhat for individual players. Although it will take years to overcome pain in the upper lip, just as it did for the lower lip in the single-embouchure technique, in Gigliotti's opinion:

[43]Kell was an Englishman who had came to the United States where he enjoyed a minor celebrity as a virtuoso clarinet player, and was widely recorded.

The player can try a double-lip embouchure as a remedial technique to improve his playing. By using a double-lip embouchure, a player might improve tonguing, intonation, tonal strength, and tense pinch on single-lip embouchure through relaxation. One of the benefits of this relaxation is that the player can maintain even pressure on both lips, which the single-lip embouchure player cannot do.[44]

And as Opperman claims in the interview: "Double-lip embouchure is more lyrical. It allows more flexibility in playing. One can get unlimited vibration because both lips just keep even pressure for playing. My teacher McLane also said 'What ever one can do, I can do more easily with double-lip embouchure.'"

The differences between these two embouchures also influence tone quality. As mentioned in Opperman's comment, a player will have a more open mouth cavity and even pressure when he or she employs a double-lip embouchure. Because the player must lower the upper lip in a way that involves the facial muscles and opens up the mouth cavity, the double-lip embouchure allows the player to imitate a singer's "Oh |o|" position. This is the reason Gigliotti has his students warm up by playing with double-lip embouchure for five minutes. Gigliotti also has his students form the following shapes in the following order: EE |I|, Eh |e|, Ooh |u|, Ah |a|, Oh |o|. This enables a student to move the throat

[44]Said during interview.

gradually from the first very stretchy position (EE) to a very open (Oh) position, following the same pattern practiced by vocalists during their exercises. By practicing this open-cavity exercise without changing their embouchures, Gigliotti thinks students can achieve the same enhanced sound coloring enjoyed by those practicing double-lip embouchure.

If one can play better using either the single- or double-lip embouchure, then that is the one to choose. Granted, "better" sometimes exists only in the player's mind and not necessarily in the listener's ear. Players might perceive that they are getting better sound with a certain fingering, embouchure, reed, or clarinet, even though no one else can hear it. The greatest value to certain choices is sometimes only psychological. As the famous French oboist Maurice Bourgue once said to one of his classes, "The real embouchure is in the stomach. The other is only a connection. You should take the reed as you take a forkful of food: simply."[45]

[45] Anthony Pay; *The mechanics of playing the clarinet*, The Cambridge Companion to the Clarinet, Cambridge University Press, 1995, p. 117.

Chapter IV: Basic Clarinet Techniques

The most important thing for young players to realize is that it does not matter how fast they can move their fingers, how long they can hold their breath, or whether they employ single- or double-tonguing to play detached notes. Players must have the ability to play with others, in an ensemble or an orchestra; one can not be only a soloist. A good player must perform well with colleagues—whether they are piano accompanists or other players in chamber or orchestral groups. Players who realize this will be less likely to become obsessive technicians, and instead will use technique as a tool for good musicianship.

Listening to another player's performance can also improve one's playing through exposure to different interpretations. Although technique and musical conception are of great importance, it is more essential that a musician play the music interestingly, making each piece as beautiful, rough, or strong as the music demands and as his/her artistic vision allows. Thus, the true purpose of technique is to be the vehicle that enables the performer to express his musicality.

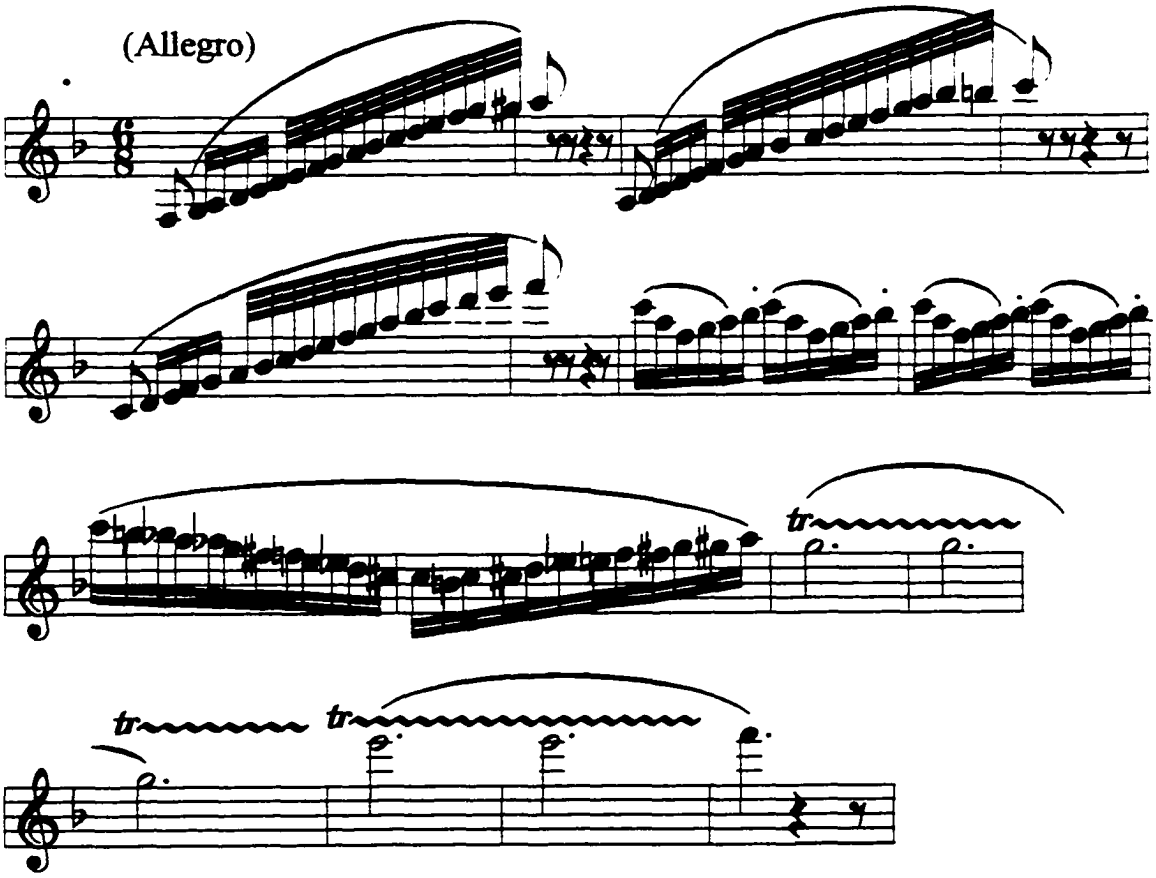
In this chapter, I examine clarinet technique, drawing both on the interviews I conducted and on independent bibliographical sources, and I discuss the modifications of these techniques over time.

1. *Fast Legato*

As Mr. Drucker said in the interview: "In playing fast, the rhythm is more important than anything else, because rhythm is the most obvious thing, which

even a poor listener can recognize." For clarinetists rhythm is the support system for all techniques, including both legato and staccato in fast or slow tempos. Any player must begin to master rhythm before he or she has reached the intermediate level of playing. With a well-developed rhythmic sense, he or she will be able to play fast passages, such as the last section of Weber's *Clarinet Concertino*, much more easily (see Illustration 3, below).

Illustration 3. The last nineteen measures, Weber Clarinet Concertino, Op. 26.



There are three basic methods of practicing a fast sixteenth-note passage which are applicable both to legato and staccato passages. The first method is to practice the passage at a fixed pace, perhaps employing a metronome to enforce the rhythm. Even in a passage such as a cadenza, where there is free rhythm, it is important to begin practicing at a fixed rhythm. By beginning at a slow rate and then gradually increasing the speed, a player will be able to stay relaxed as he or she approaches the final tempo. As Ronald Roseman said, "One shouldn't advance the speed until all tension, panic and tendency to rush is past. Any anxiety means you're still going too fast."[46]

A related and well-known technique for improving rhythm is to add a dot to every odd note and reduce by half the value of the even ones; after practicing this way, one reverses the length values and practices the other way. This exercise is more helpful when accompanied by a metronome. For example, as shown next page in Illustration 4a, to practice the fast sixteenth-note section in Weber's *Concertino* it is helpful to break it into four steps as indicated.

The second method for working with fast passages is to break them down into small beats. When applying this technique, which Russianoff called "beat to

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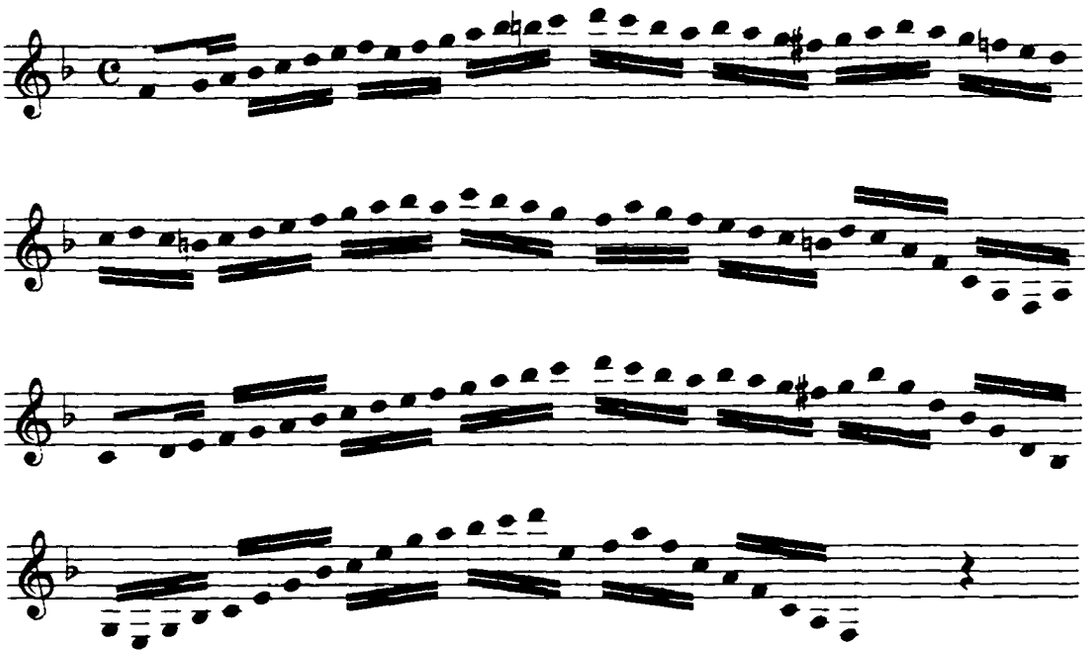
[46] Ronald Roseman, born in New York, has been the oboist of the New York Woodwind Quintet since 1961, and has joined the quintet in tours to the Far East, United States, Europe, USSR, and South America. Mr. Roseman received his BA from Queens College, studied oboe with Harold Gomberg and Lois Wann and composition with Ben Weber, Karol Rathaus, and Elliott Carter. He has made over 35 solo and chamber recordings for Nonesuch, Destro, CRI, Decca, and others. He was co-principal oboe for the New York Philharmonic in the 1973-74 and 1977-78 seasons. He was a faculty member at SUNY-Stony Brook from 1969 to 1990; and has been an adjunct professor at Yale University School of Music since 1975; professor in the Aaron Copland School of Music at Queens College since 1982; and at the Juilliard School of Music since 1973.

Illustration 4a

Weber Clarinet Concertino Op.26, m.96-103 (the fast sixteenth-note section before 'Piu lento').



Step 1: Set the tempo to 60 beats per minute, then play with metronome, as shown below:

etc.

Step 2: Play the above passage with a dotted rhythm, as shown below: etc.

Step 3: Play the above dotted rhythm reversed, as shown below: etc.

Step 4: Repeat the above three steps and increase the tempo progressively.

beat," the player divides a longer phrase into separate groups. It is important, however, to play an overlap from the beginning of one beat to the next. In the Illustration 4b, the overlap can be between the first note and the fifth note in each four-note-grouped phrase. After practicing for awhile, the player can begin playing from the first note of each succeeding group. As shown below, by gradually speeding up, one can eventually connect the entire phrase completely.

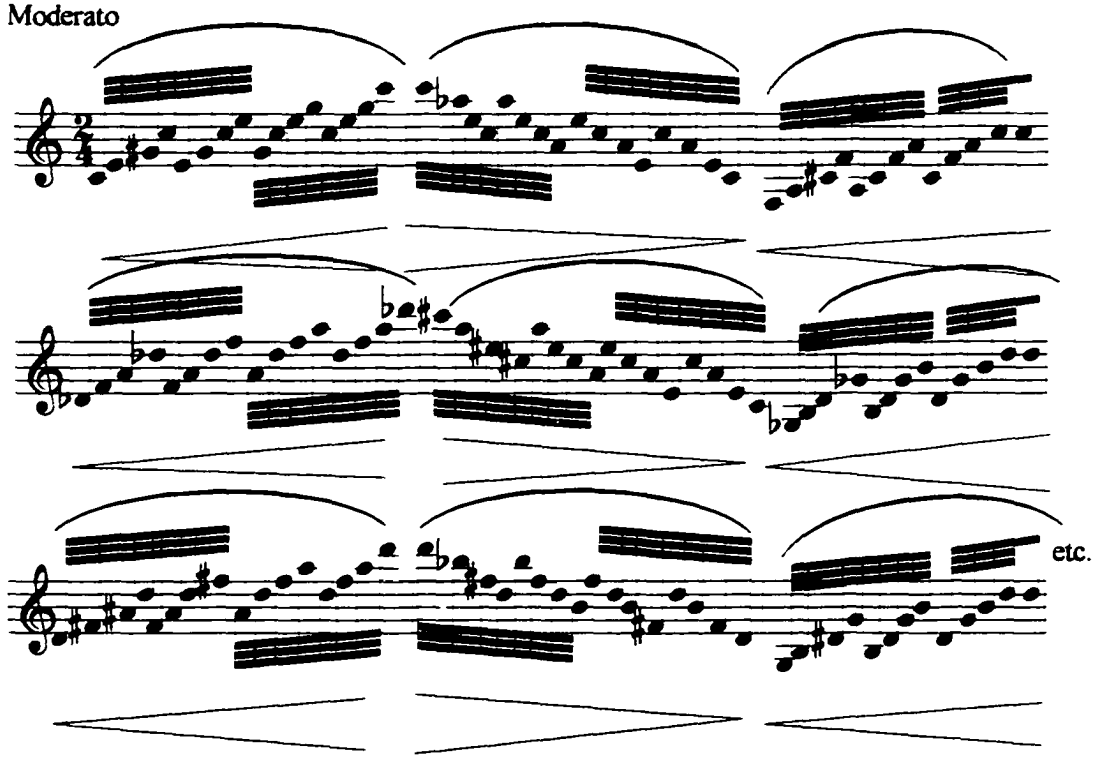
Illustration 4b. Example of "beat to beat."

In practicing the above method, players should be aware of the dynamic direction of the passage they are playing. For instance, while playing the long sixteenth-note passage in the *Seize Etudes Modernes* by Paul JeanJean (shown on next page, Illustration 5), one can overlap between the first note in one group to the next in any articulation that is desirable.[47] However, the player must create a

[47] Alphonse Leduc, 1951.
Paul JeanJean (1874-1928), soloist with the orchestra at Monte Carlo, was also a composer. His compositions include *Variation sur le Carnaval de Venise*, *Variations acrobatiques et Symphoniques*, and many other clarinet exercises.

sense of dynamic direction in the long passage in order to make the phrasing meaningful. In this case, each slur features a group of thirty-second notes with a direction up or down. Players can add *crescendo* and *diminuendo* to add lyricism and meaning to the exercise.

Illustration 5. Etude No. 4, *Seize Etudes Modernes* by JeanJean.



The last technique is "add a note" or "burst" (or "spurt") playing. A player must first isolate a small portion of a passage and then play it repeatedly, adding speed and extending the number of notes in the passage each time. It does not matter whether the articulation is legato or staccato (see, for example, Illustration

6, which features one fast passage in the first movement of Nielsen's *Clarinet Concerto*). By using the technique of "add a note," the player will eventually be able to play the whole passage solidly. When a player has a long passage or arpeggio, he or she can start playing the first two notes of the phrase, and then add another note every time he or she has played the previous group well. Another method is to practice this method from the end of the phrase, adding the notes in backward order (see Illustration 6a). If used correctly, either method should enable the player to play the entire phrase evenly and correctly.

Illustration 6. Nielsen Clarinet Concerto, m. 63-64.

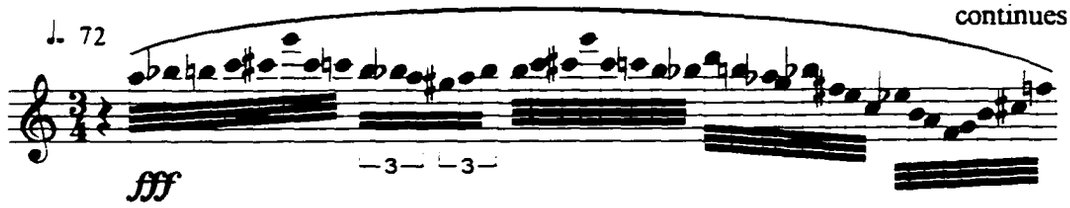
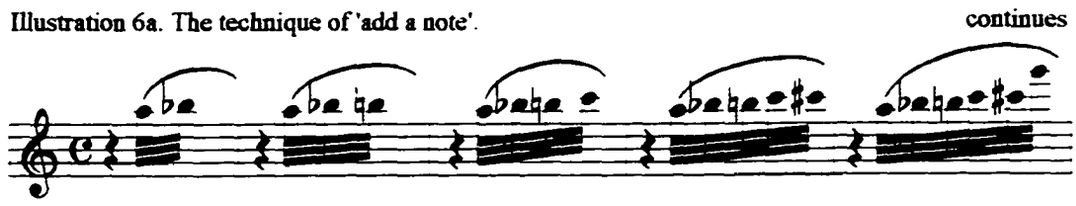


Illustration 6a. The technique of 'add a note'.



It can be boring to practice such fast sixteenth-notes phrases without any dynamic. As Mr. Moses suggested in the interview, "A better way of practicing is always to practice in relation to a piece—such as Rose, Weber, or an orchestral excerpt, and those fundamental and popular pieces." It is also better if a player practices in a slow tempo first, speeding up only gradually. It is sometimes helpful to practice a passage at exactly half tempo because this technique will allow a player to feel the same rhythm that is present at the regular speed. No matter how a player practices the fast passage, it is important to do so with wind control. As mentioned in the previous chapter, a full capacity of air lends support to techniques and produces a better tone.

2. *Single-Tonguing, Synchronization of Tongue with Fingers*

As Gigliotti said in the interview:

> When students have trouble with the position of tonguing for playing a phrase, I will have them first sing the passage [with articulation]. Then I tell them to analyze what they were doing with the tongue when singing. After that, they can just play the same phrase [with clarinet] doing exactly what they did while they were singing, and they will find the right place for the tongue in the articulation. They will realize the position for tonguing is right at the back of the upper teeth. The feeling of singing a song and playing a wind instrument should be the same.

These similarities between singing and playing the clarinet apply to all other instruments as well, including other wind instruments, piano, strings, and percussion. Tonguing for clarinet has the same function as the bowing for strings. It dominates all textures (legato or staccato), tone colors (gentle or expressive), and even pitch (flat or sharp) by the way the tongue is placed.

Tongue position is very important for every wind instrument, because it controls the articulation of the music. For clarinetists, the position of tongue in the mouth can be either flat, as the syllable "[O]" or a little forward, as the syllable "[Yu]." Either way, the position should open the player's mouth cavity, aiding the sound of the tone in much the same way it does for singers. In Mr. Neidich's opinion, young players should be encouraged to think of the syllable more as a "[Yu]" than "[O]." Neidich believes that since the former supplies a more forward position for the tongue, it will restrict the air in the mouth in a more concentrated way, making the playing of the detached notes more energetic. The "[O]" method may lead the student to place the tongue flatly, causing a flatness of pitch.

As mentioned by Anthony Gigliotti and Bernard Portnoy, students traditionally have been taught that the most important thing to remember while playing detached notes, so-called staccato or tonguing, is to have the fingers in place before the note is sounded, not with the note or after it. Obviously this is not difficult to do when there are long spaces between notes, but even with fast tones there is enough time to prepare the fingers. Leon Russianoff used to call this method "finger before tongue," because everything is placed before the note is

sounded, beginning with the fingers, then the tongue, and, finally, the note itself. The fingers must anticipate the tongue, a very difficult thing to do while playing at a fast tempo. One can practice such passages at a slower tempo, placing the fingers in the position of each note before striking the reed. If one gradually increases the tempo while practicing in the same way, the final tempo can eventually be achieved without sacrificing clarity.

Frederick Thurston also describes the above method in this way: "You must now leave your tongue in position against it, and then release it and replace it as quickly as possible. This will give you a short note....Repeat this quick release-and- return action of the tongue until the whole breath is exhaled."[48] This sentiment was also enunciated by Mr. Russianoff, Mr. Gigliotti, and Mr. Portnoy, and this method has become the standard rule for playing and practicing staccato on the clarinet in this century.

However, Charles Neidich has a different opinion. During our interview he told me, "I think the finger and tongue should move at exactly the same time. To place the finger before the tongue does not mean anything when a player has a fast passage. That motion is in the mind. One should think ahead of the phrase but place the fingers and tongue at the same time."[49] Players must consider these two concepts carefully and find the method that works best in their own playing.

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[48] Clarinet Technique, Oxford University Press, 1964, pp. 26-7.

[49] Logically, player can place his fingers and tongue to the instrument and reed at the same time, but there has no possibility that reed can be sounded at the time player's tongue touch it. The reed must vibrate after the player's tongue has left the reed. What Mr. Neidich means here is that the motion is in the player's mind.

For articulation, there are basically two types of staccato. One is to start the note without stopping. The other is to start and stop. Although these two types apply to different characters, the resultant articulation, whether it is on a note with an accent, wedge, or sforzando, should be equally short. For the "start and stop" type, the important thing is that the sound is produced not by tonguing on the reed but by releasing the tongue from the reed. For example, one can place the tongue on the reed and release it, producing a sound of "La" or "Li." By putting the tongue back on the reed each time, one will get the character of "single-tonguing." In discussing the other type, "start without stopping," Neidich says, "One should think of the tongue as a circle rather than a point; the tongue is not an arrow." This implies that the motion of the tongue should be more like "Li-Li-Li" than "Ta-Ta-Ta" or "Da-Da-Da," and that the motion of the tongue should be more natural, soft, and forward. The difference between these two types is similar to the difference between the two concepts of detached note playing discussed above. The first type of articulation produces the tone after the tongue has been placed, while the second type blows air and places the tongue at exactly the same time. Either way, the tonguing should feel like the syllable "Li" because in this shape it will give the player more relaxation and speed. The greatest benefit of this shape is that it enables the player to retain a forward motion for playing staccato, much like the "[Yu]" shape that Mr. Neidich suggested. The "Li" shape will also make the tones sound energetic.

As Mr. Drucker mentioned, it is best to have the tongue close to the reed

for tonguing purposes. If a player wants to move the tongue faster, then the smallest possible distance between the tongue and reed must be kept. There is no precise measurement for the proper position of the tongue on the reed, but all the clarinetists in my interviews indicated that the tongue should strike a short way back on the reed, just a little bit below the tip. The tongue should always strike the reed lightly, not in the gap between the mouthpiece and the reed but, instead, just below the reed. This placement is very different from the one advised by Mr. Thurston, which indicated player to "tongue at the tip of the reed."[50] Mr. Krakauer clarified the way he tongues and stressed what he sees as the proper approach to tonguing:

> If anyone forced me to tongue at the tip of the reed, I would give up playing the clarinet. The question is probably not the location on the reed. Rather, it is a question just like a speech! You have to be able to say and hear it. Hearing what you do is imperative. Some students who have trouble tonguing just tongue too hard. They tongue too close to the reed. They try to tongue with the beginning of the note, the ending of the note, and every note. That is just not necessary. You also have to realize that when you are playing in a group, you are not the only one playing. You have to hear the others, not only yourself. Very often, players think that only their notes are being heard, but in fact others' notes are being heard also.

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[50]Clarinet Technique, Oxford University Press, 1964, p. 25.

This comment helps explain why a player should not tongue on the tip of the reed and should not apply too much force. According to today's clarinet interpretation, players need to present a generally lighter and more natural staccato, following the tradition of the French school. (Please refer to the fifth section in Chapter III *Comparison between Single- and Double-lip Embouchure*.)

When playing staccato, players should also remember that a single staccato note should have the same quality as a long legato note. More precisely, a short note should have the same quality as a long note, and it should be sounded with the same tone quality as a group of short notes. This is something that should be attended to carefully. Young players often produce very pretty sounds when playing legato, but are unable to produce the same quality in detached notes. The sound should be the same for both short and long notes, for both legato and staccato. Detached notes should not have a different sound. When a player uses air in a relaxed manner, he or she will play detached notes better and more easily. A player who holds too much tension in the chest will have difficulty articulating phrases with the tongue, because tonguing is closely connected to breathing and is related to the way a player uses air. Therefore, practicing breathing with tonguing (single- or double-) is very important. To help with such practice, Keith Underwood[51] has developed an air-bag that inflates each time the player breathes

[51]Keith Underwood, flutist, received his Master's Degree from the Yale School of Music in 1976, and is currently on the faculty of Graduate School and University Center, City University of New York. He has performed with the New York Chamber Symphony, the New York Philharmonic, and other ensembles. The air-bag he invented is a sealed plastic bag with a pipe that player can

while using the proper "Li-Li-Li-Li-"[52] tongue shape. Another way for students to increase the speed of single-tonguing through the use of air is to play every second note very rapidly and then add another note during each successive exercise (this is very similar to the "burst" technique mentioned in the "fast legato" technique section above). While playing detached notes, a player also has to treat the last note like a downbeat, providing a destination for the playing. As Mr. Neidich said in the interview: "It is important always to have a destination for a passage; it will help to increase the speed of tonguing."

Because the tongue is a muscle which, like all other muscles, can be strengthened by daily exercise, players can improve their tonguing technique simply by practicing. It is best if tonguing is practiced during brief intervals, using the "burst" method. Because of muscle fatigue, each tonguing session should be limited to approximately five minutes. The student should always give the tongue some time to rest. While practicing tonguing, it is helpful to practice chromatic scales, beginning with the bottom note of the scale and gradually adding notes on the way up. Such exercises "should be done as skimming a rock on top of water, but not digging into it."[53]

When there is a detached passage with several tempo-change markings, one should play it straight through at only one tempo the first time. Once one has grasped the rhythm of the passage, one then can begin to interpret the passage,

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inflate into it.

[52]For single-tonguing only; please refers to the next section for the way to practice double-tonguing.
[53] By David Krakauer, during interview.

fitting the proper notes to each beat and moving towards rubato in a passage that is indicated to be played with rubato. In any case, the player should have the ability to play all passages in perfect rhythm, and should place the tongue at the beginning of a slur as well as in a passage of detached notes. All the clarinetists in my interviews suggested that the clarinet excerpt from Mendelssohn's *Mid-Summer Night's Dream* is a good passage to use for practicing staccato.

3. *Double-Tonguing*

Double-tonguing is a technique that allows players to acquire greater speed while playing detached notes. Clarinetists with good double-tonguing, such as Charles Neidich, can easily reach a very rapid speed while playing detached notes. Neidich demonstrated double-tonguing on the fast sixteenth-note section of the Weber *Concertino* (see in Illustration 4, in the first section of Chapter IV). On the other hand, some clarinetists with exceptional single-tonguing do not feel the necessity to study double-tonguing. Stanley Drucker, for example, demonstrated his ability to rapidly single-tongue by performing the famous fast passage at the end of the first movement of the Nielsen *Concerto*. However, double-tonguing is generally quite popular among clarinetists. Many clarinetists feel it is a good way to achieve extra speed, and every advanced student today has been exposed to double-tonguing technique, which offers not only speed but also an alternative way of playing.

Charles Neidich explained that double-tonguing contains two syllables.

"La" is formed at the tip of the tongue. "Ga" places the player's tongue against the roof of the mouth, at the back of the tongue near the throat. Acquiring his technique requires that the player form a "Ga" sound that is just as short as the "La" sound. In other words, in order to play double-tonguing well, players must be able to balance both the "La" and the "Ga" syllables. The first step is to slowly practice the lower end of a scale, such as the first octave of G major, while forming the "Ga-Ga-Ga" shape in the throat. The second step is to alter the "Ga" by using the teeth to form "La," placing the latter syllable in the same way that one would while using single-tonguing. Finally, one should alternate between the two sounds while speeding up the scale, forming the pattern "La-Ga-La-Ga." The key to double-tonguing is balancing the "Ga" of the throat with the "La" of the teeth, making the tone quality equal in both syllables.

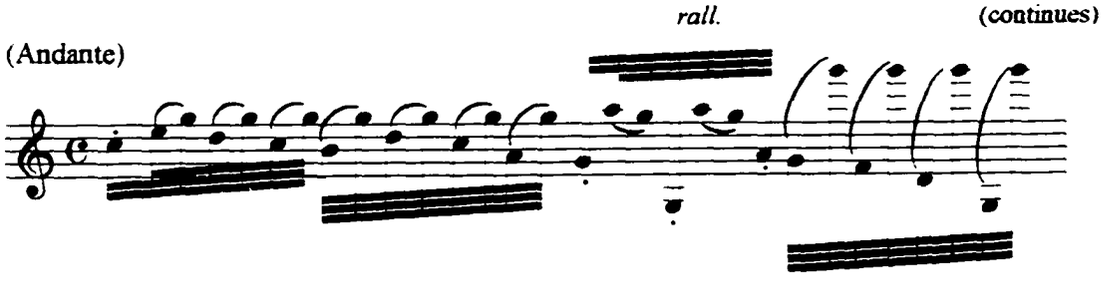
Double-tonguing is easier in the lower registers, harder in the middle, and even more difficult in the higher registers (especially for notes in the extreme registers of C-sharp" and above). When a player speeds up and moves to a higher register, he or she forms a more precise and focused air column. In order to avoid the noise that sometimes results from this, the player can try placing the lower lip in different position on the reed. By practicing double-tonguing in the same manner that they practiced single-tonguing, players can achieve balanced double-tonguing, with correct air column and embouchure, even in the higher registers. In three to six months the most talented and industrious students can acquire at least two-and-one-half octaves above the bottom register of the clarinet. The flute

excerpt of Mendelssohn's *Mid-Summer Night's Dream* is a good passage for clarinetists to use while practicing double-tonguing.

4. Playing Large Intervals Smoothly

Playing large intervals smoothly is a challenge for every clarinetist. It requires not only routine practice of fingering but also adjustment of the embouchure for each different note. Passages such as the *Andante* section of Luigi Bassi's *Concert Fantasia on Rigoletto* (see Illustration 7) require a great deal of time and concentration to learn (especially because that particular passage involves the intonation of high-G, which is very difficult for all clarinetists).[54]

Illustration 7. The *Concert Fantasia on Rigoletto* by Giuseppe Verdi/Bassi, m. 80.



In order to play large intervals smoothly, clarinetists must control both

[54]This is a showpiece characteristic of the nineteenth century, which was composed in 1885 by Luigi Bassi (1833-1897), based on the melody from the opera by Giuseppe Verdi. Different fingerings produce different intonations for this high-G, and all clarinetists spend years to accomplish this pitch. However, all these fingerings are still imperfect because of the instrument itself. There is more discussion about the instrument in the first section in Chapter VIII.

In order to play large intervals smoothly, clarinetists must control both embouchure and breath. Clarinetists must practice the overtone system of the instrument before they can achieve the proper embouchure for different registers. Joseph Allard, one of the most respected clarinet teachers of this century, taught many of his students about overtone techniques, which involve over-blowing the primary notes to produce an overtone at the interval of a perfect twelfth above the fundamental note. For example, the same fingering that produces the open G can also produce a high D, which is a perfect twelfth above it (shown below, Illustration 8). The embouchure should change slightly for each register and sometimes for each note. The clarinet's overtone series sounds the odd partials: the first, third, fifth, seventh, ninth, and eleventh (see Illustration 9). The position of the player's lower lip on the reed changes for each partial. For example, the lip is slightly lower for the third and fifth partial than it is for the first and seventh. Players may find that different positions work better on different mouthpieces.

Illustration 8. The pitches G and D a perfect twelfth above can be produced with the same fingering.

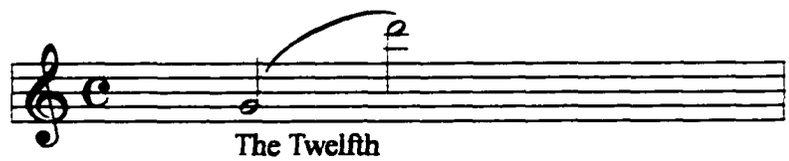
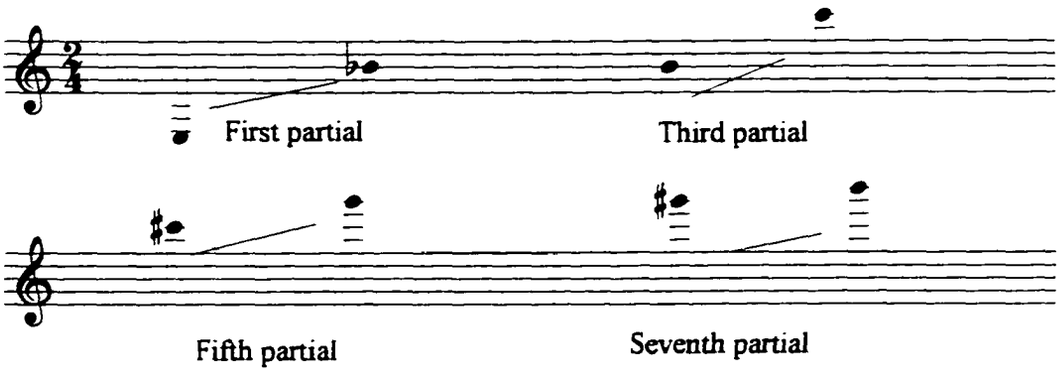


Illustration 9. The ranges obtained by using the first, third, fifth, and seventh partials.



Knowing the overtone system of the clarinet enables a player to play large intervals simply by moving the position of the lower lip on the reed. To play the intervals smoothly, however, players must not be afraid of moving the lower lip, and they should feel the change of position while they are doing it. Many beginners feel more secure locking their embouchure into one position, and a few even mark the position on the mouthpiece. This, however, is not appropriate. As Charles Neidich said in the interview, "The clarinet should be played with more fluidity, just like a singer or a horn player learns to feel where the notes are."

Knowing the proper lip placement for each note of the overtone system can help players learn to play intervals smoothly.

Because the overtones of the clarinet sound at the twelfth, they are quite different from the octave overtones on instruments such as the flute. Applying the overtone rules of octave instruments to the clarinet will produce clarinet overtones as follows: the first a twelfth above the fundamental note, with subsequent overtones of a sixth, fifth (it actually sounds flat), third (it actually sounds flat), etc., above the twelfth. For example, if one plays, with the same fingering but different embouchure positions, on the root note 'C,' the following notes of the overtone system should be produced: C-G"-E'"-Bb"(flat) '-D'""(flat)." However, the notes actually sound more like C-G"-E'"-A'"-C#'", because the pitches of last two notes are flat.

Playing overtones on the clarinet requires a balance between pressure and release on the reed. It also requires the production of the proper sensation in the voice box (larynx). Practicing overtones will help clarinetists discover the tone colors of each register. As Joseph Allard said, "We went together with all colors of the rainbow as the overtones on clarinet."[55] Allard suggested that clarinetists practice overtones by following these steps:

Play from high to low register with the low-register fingering. For example,

[55]Mentioned by one of his last pupils, David Tofani, in the conversation with the author over the phone in March 1998. Mr. Tofani had studied with Allard in 1962-1967 at the Juilliard School of Music. He worked with Mr. Allard privately until the death of Allard in the late 1980s.

play from D''' to G' while pressing nothing; from C#''' to F' with the F fingering, etc. While playing the first step, players must pull their mouthpiece out from the deeper embouchure originally used for the high register. A player must first place the mouthpiece deeper in the mouth for the high note, then move up the lower lip while pulling out the instrument a little bit, to play the low-register note. At this stage, the reed must remain on the plateau of the lower lip, and cannot push out the lower lip obviously.[56]

Because the embouchure for each note is different, it is essential that players develop flexible embouchures. A player with flexibility will be able to feel the different responses of each note with the lower lip. Students can learn to play large intervals smoothly by practicing Klosé's exercise (see below Illustration 10, for a partial example), which moves through many intervals, including the third, fourth, fifth, sixth, seventh, octave, and even twelfth. At first, interval exercises like this one will inevitably loosen a player's embouchure. Over time, however, he or she will develop the proper embouchure for each note and will learn to play large intervals with much greater ease.

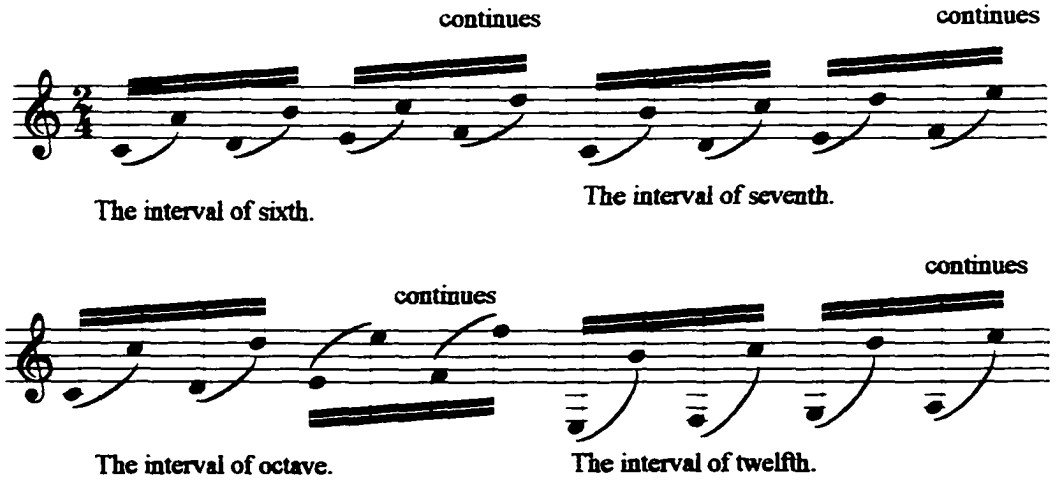
Over time, players will discover that certain lip positions are perfect for certain notes. For example, if a player wants to move a note in the first partial to the fifth-partial position, the lower lip must move in a very particular way. This

[56] Mentioned by David Tofani.

means that when a player wants to play a large interval smoothly, he or she has to anticipate the fingers with embouchure, preparing it for the different partials even before blowing the air. Moving from low to high over a large interval is usually not very difficult, but problems often arise when students try to move from a high register to a low one. Allard accommodated for this in his exercise. A little touch from the tongue to the reed can help the player stabilize the balance between registers, ensuring that he or she will reach the note without noise. This same technique, however, will cause a break in legato phrases. Whether moving from low to high or high to low, players should have the flexibility to adjust their embouchure.

Illustration 10. The exercise by Klosé.

A player could practice the intervals of a third, fourth, fifth, and, as shown here, a sixth, seventh, octave, and even twelfth.



5. *The Speed of Staccato*

It is difficult for many clarinet students to play the fast staccato passage of the Nielsen *Concerto*. In order to play this thirty-second-notes passage at the original tempo marking of 72 to a beat, one must have a fast tonguing technique (see Illustration 22 in the fifth section in Chapter VII). Teachers often encourage flexibility, telling their students simply to play as closely as possible to the tempo indicated. It is also true that, in general, musicians can often make their own interpretations, changing articulations, or even tempo, to accommodate their own techniques. Certainly there are some options they can use to modify fast passages. Altering speed or adding articulations in certain places are both possibilities.

Because the data is constantly being demanded by composers, it is difficult to say just how fast a clarinetist should be able to play. However, the ability to play sixteenth notes at 120 quarter-note beats per minute is the basic requirement, and a bare minimum of single-tonguing on the clarinet that all clarinetists should be able to achieve. The ability to play sixteenth notes above 144 to the beat is considered excellent. Players can increase their rate of tonguing by switching to the double-tonguing method. Players who have less rapid tongues should phrase articulations carefully in certain places to help staccato passages sound faster. Alan Kay, for example, has said in the interview,

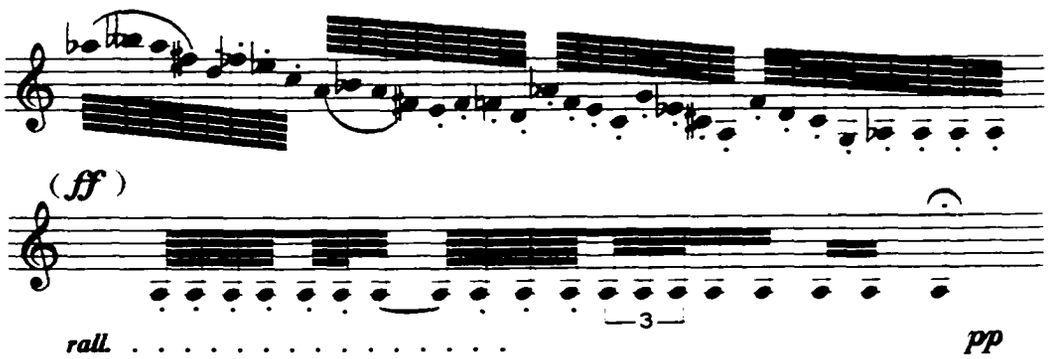
> My single-tonguing is not that fast, but I can add a slur in certain places to make the tempo sound faster. I can play the sixteenth-note section in

Weber's *Concertino* [please refers to first section of Chapter IV, Illustration 4] in the shape of two-plus-two, which is two detached notes and two slurred notes. It sounds just as if I were playing all detached notes." When I play the fast sixteenth-notes in Weber *Concertino*, I play legato and staccato in that two-plus-two combination, and the listeners can hardly recognize it as not a pure staccato.

A common passage used for evaluation of tonguing technique is, once again, the clarinet part in Mendelssohn's *Mid-Summer Night's Dream* Scherzo. The passage is much more challenging for single-tonguers than for double-tonguers. The end of the first movement of the Nielsen *Concerto* and Variation #4 of the Theme and Variations of Mozart's *Clarinet Quintet* are both good passages for evaluating a student's ability to play staccato. Whether they use single- or double-tonguing, players should be able to play all the staccato notes with the same tone color. This requires control of rhythm. Similarly, when playing long *accelerando* or *ritardando* passages, players should be able to increase or decrease the tempo without changing the tone quality. For example, in the first cadenza of the Nielsen *Concerto* (see Illustration 11), the tone color of the staccato in the repeated notes should be the same as the tone color of the notes in the previous group: all the notes are part of the same phrase. Maintaining proper tone color is the most important part of good tonguing technique.

Illustration 11. The staccato on different and repeated notes,

in the first Cadenza of Nielsen Clarinet Concerto.



Another way to help students learn rapid tonguing is to advise them not to push themselves too much. Sometimes playing a little bit easier and softer allows the tongue to relax, relieving tension that might have prevented rapid tonguing. For the same reason, playing at maximum volume should also be avoided. Exercises in dynamics can also be helpful. Playing at a fixed volume naturally slows the tonguing down, but beginning softly and gradually increasing the volume can have the opposite effect. For example, a student attempting to play four sixteenth-notes at 144 to the beat might benefit by playing the passage very softly and only gradually increasing to the desired volume.

Unfortunately, there is no substitute for talent when it comes to tonguing, and those with less talent could practice to the point of injury without reaching their ideal rate. It is wiser to rest than to push oneself, and too much practice

could make playing a burden. The best advice is "Never practice the wrong way," or, as Allard said "Practice makes positive, not perfect." This is true for all techniques, and it is especially important that young students, who are just beginning to enjoy the instrument, not push themselves too hard. For young players, every trouble and every pressure can spark a generalized fear of the instrument. From an educational standpoint, parents should not force young players to practice when they do not want to. Coerced practicing creates an environment that is unhealthy, both physically and mentally, for the young player, and it is just one example of "practicing the wrong way." Beginners should play what they are willing to play; after all, the clarinet is not the whole world to a young beginner.

PART III: THE CHANGING ENVIRONMENT

Clarinetists are influenced not only by the events that occur in their lives but also by changes in their environment, especially those that have influenced the way most musicians perform and interpret music. For example, the discovery of ebony, about one-hundred-and-fifty years ago, changed the way clarinetists placed their embouchures. Today, changes are occurring more rapidly than ever before. Thanks to modern technology, more precise and reliable materials have been used to make more accurate and reliable instruments, which in turn have resulted in the birth of new techniques. Contemporary composers and clarinetists then use these techniques in their compositions and performances. Consequently, clarinetists today must have a more flexible outlook. One of the challenges for all musicians is to balance the new with the fundamental elements of music-making, thereby arriving at a more interesting style. Musicians will only fit into today's world today if they have succeeded in this task.

In this part of my thesis, I detail the changing factors in clarinet music. I explore the changes that occurred in the clarinet instrument itself, in clarinet techniques, and in the interpretation of the clarinet repertoire as discussed in my interviews with clarinetists in the greater New York area. I have synthesized my perspectives and their opinions in Chapters V, VI, and VII.

Chapter V: The Influence of Different Materials and Elements of the Instruments on Clarinet Playing

Clarinetists have a joke about mouthpieces: a day off is a day spent trying to find the perfect mouthpiece, despite the fact that it will never be found. If, after twenty years, a clarinetist has still not settled on a satisfactory mouthpiece, the next twenty years should be devoted to making it oneself. In fact, clarinetists are perpetually searching not only for better mouthpieces, but also better reeds, ligatures, barrels, and bells. Each improvement in one part of the instrument will result in a corresponding incremental improvement in their performances. A reason for the clarinetist's fastidiousness in the quest for the perfect combination of elements is the low financial investment involved. The clarinet is the least expensive of all orchestral instruments, except for some small accessories in the percussion section; yet it has the greatest number of changeable parts. Most orchestral instruments, for example, have only two to four timbre-changing components: in the flute, the head joint and the body; in the oboe, the reed and body; in the bassoon, the reed, bocal, body, and bell; in the brasses, the mouthpiece and body; and in the strings, the bow, strings, and body (although some people may consider mutes components of the instrument). However, six elements of the clarinet affect its tone, namely the mouthpiece, reed, ligature, barrel, body and the bell.

Clarinets have been made of diverse materials, including various kinds of woods, glass, crystal, plastic, and rubber. It would not be surprising if a clarinetist

were personally capable of making each of these components, having accumulated abundant information by experimenting with them over years. The sections in this chapter introduce the parts of the clarinet.

1. The Instrument

The clarinet was invented after the flute, oboe, and bassoon were developed, completing the orchestral woodwind section during the early part of the eighteenth century. At the time two similar instruments with different compasses existed: the "chalumeau" and the clarinet.

Chalumeaux were made of cane, 8-1/4 inches long with 15 mm. bore, sounding from g to g', somewhat different from the earliest clarinets. An example was the well-known instrument by J.C. Denner in Munich: it was constructed of boxwood with two opposing keys, one in the front and the other in the back.[57] The bottom note of this two-keyed clarinet was f, and the overtone was c'.[58]

This prototypical instrument evolved quickly: its third key was invented by Denner's son, Jacob, in 1740; a fourth key for Ab/Eb was added soon after; and a fifth key for F#/C# was attached in 1770s. Meanwhile, the tradition of playing clarinets with the left hand above the right became established around 1740.

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[57]Johann Christoph Denner was born in Leipzig on 13 August 1655. Being one of the best instrument-makers of his time, Denner has not only built excellent and generally popular recorders, oboes and bassoons but also variously improved the woodwind instruments, and finally evolved the clarinet from the earlier chalumeau. Denner died on 20 April 1707, and left his business to his two sons, Jacob (d. 1735) and Matthaus (d. 1740). Both brothers died as musicians and instrument-makers in Nuremberg.

[58]The Bavarian National Museum in Munich proudly possesses a perfect specimen of one of Denner's earliest clarinets with only the two keys.

However, clarinet designs remained in flux nearly until the end of the eighteenth century: in England, clarinet barrels and mouthpieces were not separated until 1785.

During the nineteenth century, the clarinet gradually acquired its current form. In Weber's concerto (1811), Baermann introduced the ten-key clarinet made by Griossling and Schlott; and by about 1825, the 13-key clarinet was developed by Iwan Müller. Thirteen-key clarinets became standard until the 20th-century. Meanwhile, Theobald Boehm, a Munich instrument maker and flutist, invented a series of ring-keys for flutes, by which players could operate ring-keys to cover holes distant from each other. Thus fingers could cover holes well outside their normal reach, so that such holes did not have to be made smaller or moved closer to accommodate the structure of the hand.

Klosé worked upon the Boehm principle of ring-keys, and suggested a new clarinet design to Louis Buffet around 1837. In 1839, Buffet was awarded a medal for this instrument at the Paris exhibition. The number of keys in Klosé's instrument was the same as most modern clarinets. It had seventeen keys and six rings aid fingers in controlling no less than twenty-four tone holes. It proved that the earlier work of Müller and others in padding and venting had taken full effect upon clarinet design, resulting in a leak-free, comfortably played, and easily maintained instrument.

Improvements upon the Müller German clarinets have been continuous to the present day. One of the important advances upon the work of Müller arose

from the work of the great virtuoso and teacher, Carl Baermann. Baermann developed extra key extensions, enabling more than one finger to play one key. The Oehler clarinet of today is the result of many of these improvements: its present form is both a monument of Oskar Oehler's work, as well as a reflection of the sound foundation of the original Müller instrument.

The way in which the clarinet is made influences the way clarinetists play. The materials used to make clarinets today are black woods such as black coccus, ebony, Grenadilla and others. Black woods with a dense and closed texture are capable of achieving the most satisfactory tone in terms of timbre and breadth, better than the earlier choice of boxwood, which produced less resonance and required greater effort in maintenance. The contemporary clarinetist is looking for a more splendid tone color that only a clarinet made of black wood can provide. Clarinets made of other materials, such as metal and plastic, are used for certain specialized purposes. For example, the metal instruments are used in military bands or marching bands. Light plastic clarinets are employed by young beginners who do not have the strength to support the heavier wooden instrument.

The most popular bore diameter of the clarinet is about 14.85 mm. on average, which converts to 0.585 inch. A large-bore instrument of 15.24 mm. is matched with a wider mouthpiece. The different bore diameters create diverse tone colors. Musicians exploit these differences to suit their personal preferences. For example, Richard Mühlfeld played the eighteen-keyed Muller-Baermann system clarinet; Simeon Bellison played Oehler and Oehler system clarinets with 15 mm.

bore and smaller tone holes; Gaston Hamelin played the Henri Selmer clarinet with a bore under 15 mm.; and Daniel Bonade played the R-13 of Buffet—this particular model with a bore of 14.65 mm is still popular today.[59]

Besides Buffet and Selmer, clarinet manufacturers today include LeBlanc, Yamaha, and several European companies. Manufacturers are always trying to please clarinetists by improving the instrument's mechanical response, intonation, and tone color. In the United States, Buffet is currently the favorite brand, and R-13 is the most popular model. During my interviews, all the clarinetists said they use or recommend using the R-13 of Buffet except Mr. Gigliotti, who plays the 10-G of Selmer.[60]

Although Buffet has become the most popular manufacturer in the United States, many clarinetists use only the R-13, and do not prefer any other models produced by the same company. Mr. Moses offers a reason why these musicians choose to use the R-13: "I can always pick the best one from a large amount of stock, unlike models such as Elite or Prestige, where you have only one choice." He then elaborated: "Once you find the best clarinet for you, you want to play it for a long time. Buffet has many R-13s in stock that you can choose from. You can keep playing and replacing the same model easily."[61]

Clarinetists also prefer the R-13 for another reason: there is little distinction

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[59]The Buffet R-13 clarinet has a forty-year history to date. The R-13 is created from high quality Grenadilla wood to ensure evenness of tone and response.

[60]The 10-G was designed for the American orchestral player, with the structure of the .574" polycylindrical bore and undercut tone holes.

[61]Said in the interview.

between the different models manufactured by Buffet. For example, if one were to compare the model R-13 and one from Prestige, costing around $2000 and $3000 respectively, one would discover that the quality of the two instruments is approximately the same. At least, they do not differ as much in caliber as do violins that cost one hundred dollars versus those that cost one million dollars.

It is interesting to note that a clarinet manufacturer's marketing strategy can have a profound influence on musicians' choice of instruments. Immediately after World War II, Buffet supplied large numbers of R-13 clarinets to the United States. Every clarinetist in that period decided to purchase this model because of its sweet tone and reasonable price. The tone color of the R-13 became the standard in performances given in the United States. Consequently, no one wanted to rebel against the standard by performing with another model of clarinet. A similar situation occurred in Far Eastern countries such as Taiwan. The best-known clarinetist and teacher in Taiwan, Mr. Yao-Wu Shieh, recalled in a conversation over the phone with the author in 1997, "When Buffet first sent clarinets to Taiwan in the 1970s, the large numbers of clarinets of the model RC dominated the entire market, and the players in Taiwan still use RC today."[62] However, recently, the tone color of RC has not satisfied Taiwanese clarinetists,

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[62]Mr. Shieh is the first clarinetist in Taiwan who came to United States and studied with Bernard Portnoy in the 1960's. Mr. Shieh is now retired and living in the Southern Taiwan.
Designed by and named for one of Buffet's designers and technicians, Robert Caree, the Buffet RC Clarinet is preferred in Europe for its softer sound color and easier response. The RC has the Buffet standard poly-cylindrical bore in the upper joint, but its lower joint and bell are conical, and its bell also has an egg-shaped ream just below the socket, for greater sound emission. This design produces a slightly brighter tone with somewhat less resistance than other Buffet models.

perhaps because the preferences of American players have influenced the partiality of these musicians. Taiwanese clarinetists have started trying models such as Prestige, Festival, or even R-13. One can predict that these musicians' new taste in instrument will create a new style of clarinet performance in Taiwan.

Practically all clarinetists changed the setup of their instrument in some ways after they purchased it.[63] Some of them modified the tone holes, adjusted the springs, changed the barrel and bell, or even added or take away certain mechanisms. For example, Mr. Bernard Portnoy said in the interview: "I use Buffet R-13 with simple key system for over four decades." Portnoy had made smaller changes in another instrument that he owns, describing how "the A-clarinet is still the one I bought in 1935, and I never changed the A-clarinet except the barrel and the bell." Although most clarinetists change the setup of their instrument, they do not purchase new instruments very often. Mr. Stanley Drucker kept his A-clarinet longer than his Bb-clarinet. He suggests changing the Bb-clarinet every five to six years, but players do not use the A-clarinet very frequently. On the other hand, the life span of a clarinet also depends on the quality of individual maintenance. For example, Mr. Portnoy and Mr. John Moses have both used their Buffet R-13 clarinet for over forty years. In fact, Mr. Kalmen Opperman has recently reconstructed a nearly 100-year-old clarinet.

Selmer is another popular manufacturer of clarinets in the United States.

[63]So-called 'Setup' means the combination with clarinet's mouthpiece, ligature, reed, barrel, body, or even bell.

The best-selling models of Selmer clarinets are currently 10-G and 10-S2, costing $2995 and $3150 respectively. Benny Goodman endorsed and promoted the Bundy Resonite model 1400 of Selmer in the 1950s. As a friend of Benny Goodman, Mr. Opperman claims that the instrument that Goodman used was the best of the model. Opperman has never found any other Selmer clarinet that could compete with it. The model, 1400, had sold one million units by 1978 and continues to attract clarinetists today. However, Oscar Lee Gibson claims in his book *Clarinet Acoustics*: "The very best unfraised[64] Selmer clarinets in the Boehm system were made before the Balanced Tone series of about 1934 and in bores ca. 14.85 mm."[65] Between World Wars I and II, Selmer clarinets were by far the most popular professional clarinets in the world. Why the Selmer Company changed its design is still unknown, but Gibson's statement may partially explain why some clarinetists are always looking for old-model Selmer clarinets.

Mr. Gigliotti helped Selmer to develop the 10-G model, which produces a sound between the typical French and German clarinets, with a bore of 14.71 mm. This model is the only Selmer clarinet that did not come with its own mouthpiece. It is suggested that the 10-G be played with the mouthpiece "P," which Mr. Gigliotti had also designed. Besides the 10-G and the "Recital" model, with the bore of 14.4 mm., the Selmer company has just, in 1997, developed a new model

[64]Before making the tone-holes.

[65]Indiana University Press, 1994, p. 7.
Boehm system clarinet is 26 1/2 inches in length and an internal bore of just over 1/2 in. It is a fairly stout instrument, and the reason for this is that the bore is virtually the same for the greater part of its length.

called "Signature" with a list price of $3995.[66] Much like Buffet, Selmer seems to expand its share of the market by creating better models and selling them at a more expensive price.

Choosing a brand or model of instrument is a matter of individual taste. As a bass clarinetist, Mr. Krakauer admires the Selmer bass clarinet, because the tone it produces matches the style he needs to play Klezmer music. For Krakauer, the sound produced by a Buffet clarinet is a little over-refined. He thinks the old Selmer is good for performing jazz and improvisational passages since it has a relatively open and broad tone color.

The most influential clarinetist of this century was Benny Goodman. He kindled America's interest in clarinet music by his swing performances. He had also expanded the clarinet repertoire by performing, between 1935 and 1945, the *Contrasts* by Bartók, the *Concerto* by Copland, and the *Ebony Concerto* by Stravinsky. Goodman was both a spokesman for Selmer clarinet and a member of the company's Board of Directors. He had grown up with the clarinets manufactured by Selmer. In addition, Goodman had trouble performing Copland's *Concerto for Clarinet* in Dallas, using the pre-1950 model of the Buffet R-13 with the bore near 15 mm. Nevertheless, Benny Goodman still owned and sometimes played both the Buffet and the Selmer clarinets.

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[66]The "Signature" in the Selmer is designed with the .575" bore. As introduced by Selmer: "The softest *pianissimo* can be produced almost effortlessly, and the clarinet maintains a uniform, homogenous sound over the entire range and at all dynamic levels. Accurate intonation, particularly in the treacherous throat E to high B and throat F to high C intervals, results from detailed bore proportion, precise reaming, and exact tone hole size, position and undercutting. The Signature's Streamline design contributes to its quick response."

Today, there are many individual clarinet makers who fashion new models using different materials. For example, Kalmen Opperman can make a whole clarinet from the unfraised body himself. Clarinetists today are still experimenting with new models of different brands. Although composers rarely ask musicians to change the setup of their instruments, clarinetists themselves sometimes want to perform music with instruments that produce different tone colors, especially when they are experimenting with contemporary techniques such as multiphonics or flutter-tonguing. Clarinetists therefore want to know more about the response and resistance that different clarinet manufacturers can create. By learning about the instruments' possibilities and limitations, performers hope to find clarinets that will fulfill the needs of their varied future repertoires.

2. *The Mouthpiece*

The mouthpiece is the soul of the clarinet—all performances depend on it. The length of mouthpiece is approximately 89 mm. long for French and 90 mm. for German. Several materials have been used to make the mouthpiece during different periods in history: wood at the beginning, then ivory, and currently, ebonite, crystal, plastic, or metal. The wooden mouthpiece has the reputation of giving rise to the sweetest tone; however, the tone that it produces can become inconsistent when the mouthpiece is affected by fluctuations in temperature and/or humidity. Crystal is a strong material that never changes with fluctuations in weather; however, its brittleness causes a serious problem since "the adjustments

or finishing on the inner surface becomes difficult and unreliable to make" when one fashions a crystal mouthpiece.[67] Nevertheless, crystal mouthpieces have been used and made since World War II—an example would be the Pomarico and O'Brien Crystal mouthpiece made in Italy.

Glass was used in the early nineteenth century for Laurent's and Breton's glass flute while the "ébène" was strongly suggested by Klosé.[68] Using glass as the material for a mouthpiece is problematic, however, because it is heavier and less vibrant than either rubber or plastic. Furthermore, a glass tip can be easily broken off. Ebonite (hard rubber) is less easily broken and sufficiently stable for all practical purposes. This material was first used to make musical instruments in 1851; it was used to make mouthpieces a few years later and remains a popular choice today. Mr. Opperman offered a persuasive argument for its continued popularity, in the interview: "Plastic is less resonant, and crystal is difficult to work inside. Hard rubber can give rather a good tone and it is adjustable."

At the same period when ebony was first used to make instruments, the virtuoso J.S. Hermstedt played upon a gold mouthpiece with silver lay (see below, Illustration 12, the mouthpiece specifications).[69] Theoretically the mouthpiece should be made of the same material as the tube, but in practice each player will

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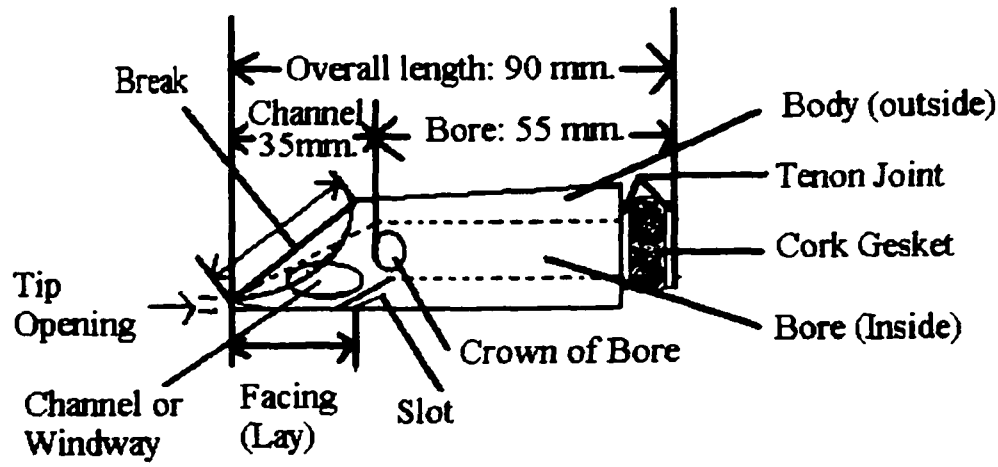
[67]By David Hite, during conversation by phone, January 1998.

[68]American black wood.

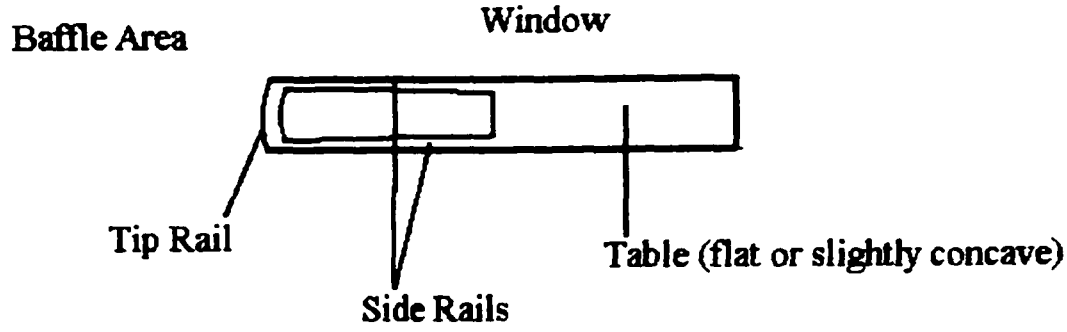
[69]Johann Simon Hermstedt (1778-1846) was born on 29 December 1778, in Langensalza, the son of an army musician. Spohr composed four concertos for Hermsted about 1810. However, Spohr was not pleased with his playing. In the autobiography he remarks: "Hermstedt does not develop his taste to the same extent, though he continues to improve his technique. His performance is full of mannerisms, verging on caricature." Hermstedt met Weber in 1815 and the composer was to write a clarinet concerto for him (left unfinished).

choose the best mouthpiece adapted to the conformation of his or her lips and jaw. Currently, the best material from which to make the mouthpiece is bored-rod rubber (steel-ebonite): it has an improved tone quality, good intonation, and is more reliable under different temperatures than are other materials.

Illustration 12: Bb Clarinet Mouthpiece Specifications, by David Hite.



Clarinet Mouthpiece



There are four criteria for choosing a mouthpiece, as Keith Stein suggested about forty years ago:[70] intonation, tone quality, security from squeaks, and responsiveness. These criteria still work for clarinetists today. Generally, a close or medium lay of the mouthpiece can give a more refined sound with control of tone gradation, while an open lay is more suitable for playing glissandi in jazz or contemporary music (which requires a more open tone color).[71]

Unlike the flutist and oboist, the clarinetist has to be concerned with both the mouthpiece and reed, and with building a relationship between them. In other words, he or she needs to set up the mouthpiece and the reed. Naturally, the reed is another important factor that influences the tone color being produced. (For more specific information on the reed, see the fourth section in this chapter.) Generally speaking, the closer the facing, the harder the reed; the more open the facing, the softer the reed. Different relationships between the mouthpiece and the reed can create a variety of sounds. Based on the clarinetist's personal preference, he or she can choose among many different types of mouthpiece and reed combinations to suit the musical style. Mr. Drucker uses a medium-close mouthpiece with a fairly long curve and a small bore. In the 1940's, Daniel Bonade played on a moderate facing with a very soft reed, Ralph McLane played a slightly closer mouthpiece with a harder reed, and Robert Marcellus played with a close but longer facing.

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[70] The Art of Clarinet Playing, Summy-Birchard Company, 1958, p. 5.

[71] In general, as defined by American clarinetist, a tip-opening at the measurement of .041" is a close-facing mouthpiece, .043" is medium, and .045" is an open-facing mouthpiece.

If a player's embouchure, lip structure, and bone and teeth structure make it possible to play a slightly harder reed like Mr. Moses and Mr. Gigliotti, who use a closer-facing mouthpiece, then he or she can play with a wider dynamic range. On the other hand, jazz clarinetists, who have their own characteristic musical style, might instead choose an open mouthpiece, with a middle strength reed (in between number two and three-and-half) to achieve a more easily controlled tone color while playing with the techniques of glissandi and vibrato.[72]

Clarinetists often ask mouthpiece manufacturers to fashion their own individual mouthpieces. For example, Mr. Portnoy has designed and played a medium-open mouthpiece with a long-facing, called BP-02, which he put on the market in 1963. Mr. Gigliotti plays his own mouthpiece, called Gigliotti "P," which he distributed and originally designed for the 10-G model of the Selmer clarinet. This "P" model has a long flat facing and close tip, accommodated with the #4-1/2 Vandoren V-12 reed. The Vandoren Company designed the V-12 reed especially for Gigliotti. Mr. Moses used David Hite's mouthpiece for a while. While Mr. Hite lived in New Jersey, he custom made a mouthpiece for Mr. Moses called "JJ," today renamed L-41. Charles Neidich plays both the handmade mouthpiece by Johnston and the "D" model by David Hite.[73] Mr. Neidich combines either one of the mouthpieces mentioned above with the regular or black

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[72]Manufactures use number to indicate the thickness of reed. The higher number the harder the reed. In general, the number ranges from 1-1/2 to 5.

[73]In the conversation with Mr. Hite over the phone in January 1998, he said the design of "D" model is very similar to the M-41.

master reed of Vandoren. Sometimes, fashioning a suitable mouthpiece becomes part of the student-mentor relationship. For example, Mr. Opperman makes mouthpieces for some of his students, such as Richard Stoltzman. In the end, all good mouthpieces must be finished by hand. Thus, even two mouthpieces with identical lays, in the same model of the same brand, produce slightly different tone colors. For example, when a clarinetist plays either of the two "P" models of Gigliotti's mouthpieces, or the "D" model mouthpieces designed by Hite, he or she can notice the difference in tone immediately. The unique nature of each individual mouthpiece provides performers with the opportunity of choosing the mouthpiece best suited to their needs from all the available ones on the market.

3. *The Ligature*

The fundamental purpose of the ligature is to bind the heel of the reed to the table of the mouthpiece. It also performs two related functions: it holds the reed firmly in place, without distortion, and prevents air or saliva from escaping down the table. A correctly set ligature lets the reed vibrate in a well-balanced manner. To achieve this, the pressure of the screw(s) on the back, front, or sides of a ligature should be carefully adjusted to the reed. Although Benny Goodman had his ligature designed to be screwed on the side of the clarinet, most clarinetists in my interviews suggested that the screw of a ligature should be well balanced on either the back or front, but not on the side. Daniel Bonade had a standard ligature, but he used a screwdriver to pry the sides away from the edges of the reed; as a

consequence, the pressure would never grab the sides of his reed but only fasten it in the middle.

German players use a string to fasten the reed, because string can give the reed maximum vibration as well as a well-balanced pressure. One disadvantage of using string is that it takes too much time to fasten. Furthermore, when string is used, the reed will sometimes slide off-center when the musicians move their instruments, which would prove a disaster were this to occur during a performance.

Most players today use a ligature to fasten the reed instead of string, because it is more convenient. Ligatures may be made of silver or gilt-plated black plastic or other metals. They might have one or two screws on the front, or tableside; the ligature may be inverted, with the screws on top. Plastic screws and ligatures are more satisfactory than their brass counterparts since the shape of brass may change during the daily reed-fastening process. Since the quality of the ligature seems to affect the tone color produced by a clarinet, many different materials, as with mouthpieces, are being introduced to make ligatures. To illustrate how the ligature can influence a clarinet's sound, one can try the following experiment: when one plays an open "G" while pressing a reed on the table of mouthpiece, using only the thumb, the reed vibrates completely. Once a ligature is applied and tightened, the response will suddenly become different for each different ligature, depending upon the material from which the ligature is made and the tightness of the connection. In any case, the reed will not vibrate as

completely after the ligature has been added. In general, if a clarinetist finds a ligature that allows the reed to achieve maximum vibration, then he or she can complete the setup of the clarinet by fitting this ligature with different mouthpieces and reeds.

When the ligature presses a reed tightly or pushes the mouthpiece table in an unbalanced manner, the reed becomes distorted. This distortion creates an inappropriate relationship between the mouthpiece and the reed, which, in turn, might cause the clarinet to produce unreliable sounds. Hence, clarinetists must select an appropriate ligature carefully when they choose their mouthpieces and reeds.

4. *The Reed*

The reed is to the clarinet as the larynx is to the human voice—essential, highly variable, and capable of great beauty, sometimes even perfection. Clarinetists play better when they have a responsive reed. Nothing is more wonderful to a clarinetist than performing a concert with a perfect reed. The reed that gives impeccable support on staccato, legato, high- and low-register notes, and strong and soft dynamics, as well as a variety of tone qualities, is a "miracle," something that is almost impossible to find.

Clarinet reeds are 66 mm. to 68 mm. long, and 13 mm to 13-1/2 mm. wide at the tip. German-school reeds are smaller than that of the French school in both length and width. Just like mouthpieces, no two reeds are exactly alike. Since no

two reeds come from exactly the same environment—they may be cut from different canes and subject to different growing conditions, for example—even two reeds of the same model will be different. A question that concerns all clarinetists is: How would one describe a "good reed?" Although the quality of a good clarinet tone is still a matter of controversy, common opinion stipulates that a good reed allows a clarinetist to play throughout the dynamic range easily and evenly, especially *ppp* in the upper register. Furthermore, a good reed can support both legato and staccato notes. Such a reed is usually made from mature cane that grows on the sunny side of the bamboo. Judging by appearance, a good reed should possess the golden color characteristic of a fully grown cane. France produces the best cane, from which the finest reeds are usually manufactured.

There are currently two brands of reeds that are popular with professional clarinetists in New York, the Vandoren and the Rico. Vandoren has been the top brand of reed for classical clarinetists for a long time. The regular blue box manufactured by Vandoren is more popular than the white- and black-master or the V-12 reeds. This traditional blue box remains the favorite among most clarinetists in New York. The reason for its popularity echoes the reasons behind the prevalence of the Buffet R-13—most musicians have grown accustomed to using it and feel no need to change their habit.

Although Vandoren is the most successful manufacturer of reeds, lately, the Rico Grand Concert reed is commanding attention. David Krakauer, John Moses, and Bernard Portnoy mentioned that they have recently tried and were

satisfied with the Grand Concert reed made by Rico. Clarinetists do not frequently switch between different brands of reeds, for fear of upsetting the relationship established between the mouthpiece, ligature, and the reed. However, sometimes musicians will try a new brand out of necessity. David Krakauer said: "Although a good Vandoren reed has a really beautiful tone, they are rare. I think it is very difficult to find a good reed from Vandoren. I am fussy about my reed, and no matter how I fix or adjust the Vandoren reed, it doesn't respond sufficiently. I found the Rico reed has more consistency in its quality. It is very reliable."[74] In my experiences, there are usually only two or three well-balanced reeds with reliable tones in each ten-reed box of Vandoren reeds. When clarinetists purchase reeds, they are not allowed to open the box unless they have already paid for it. So purchasing reeds is a gamble. Therefore, it would not be surprising if a brand producing a more consistent quality of reeds increased its share of the market. Clarinetists also make reeds themselves. Most of them scrape ready-made reeds, but a few actually make reeds from unprocessed canes.

The "heart" of the reed (see illustration 13) should be balanced on the left and right. When the heart moves higher, the reed will become harder, and vice-versa. While the reed can be quite firm, the tip of the reed should not be hard (since the tip affects the instrument's tone and is essential to playing very softly when the clarinetist attacks the reed with the tongue).

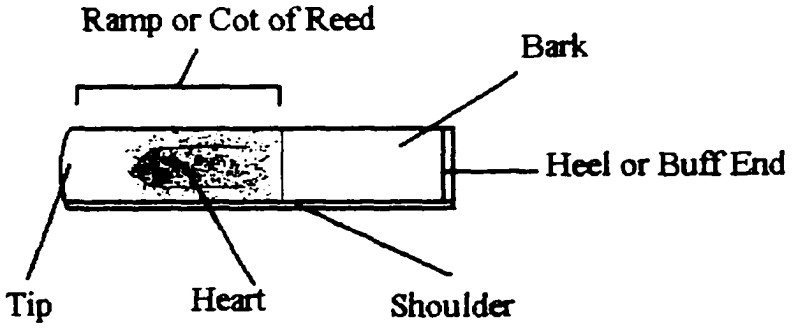
Even good reeds must be shaped, or "fixed," or "trimmed" for the best

[74] David Krakauer is one of the clarinetists who represented the Rico company in 1997-1998.

sound after they are purchased. A reed trimmer can help students cut the edge of a reed if the reed is too soft or broken. After cutting the edge, one must scrape it from the back of a reed with a sharp pocketknife in one direction (some people use #600 sand paper) on a flat surface, such as on a piece of glass. When musicians fix the reed, they should keep it balanced on both sides; at the same time, they should make sure that it seals the opening of the mouthpiece.

Illustration 13. The "heart" of reed.

Front of Reed, sourced by David Hite.



If the reed is relatively soft, the position it occupies on the mouthpiece might be slightly higher; and if the reed is harder, it should be placed a little lower. Experienced clarinetists will keep several reeds in reserve, so that they may use the one most suited a particular performance. The mouthpiece and ligature being used, the humidity in the concert hall, and particularly the musical styles and the

techniques featured in the performance will all affect clarinetist's choice of reeds. The last factor mentioned above is especially important because notes in the extreme register need stronger support from the reed, while pieces requiring long breath want a softer or easier reed. In any case, the clarinetist must know how to adjust the reed. James Schoepflin, writing in *The Clarinet* in 1974, offers young musicians some good advice about reeds:

1. Have at least three reeds in the case at all times, preserved by some device to protect against damage.
2. These reeds should be worked on by the student at least enough to insure the longest possible playing life.
3. The young player must cultivate basic concepts of reed adjustment and
4. break in reeds on a regular basis, thus becoming skillful enough to be able to handle future problems.[75]

Judging from Mr. Schoepflin's statements, it appears that little has changed in twenty years: clarinetists still scrape the reed, cut the reed, and keep many reeds in their cases. Nevertheless, the style of clarinet performance has become freer during the last twenty years. Lately, clarinetists place more emphasis on mastering interesting techniques rather than on achieving the traditional sweet tones required to play Mozart or Brahms. Based on this trend, one can predict that it will become

[75]The Clarinet, February 1974, p. 6.

less important for clarinetists to master the techniques of reed-making. Furthermore, as the technology and equipment used to make reeds become more sophisticated, clarinetists can easily pick good reeds from the ones available on the market.

5. *The Barrel*

The barrel or socket is the shortest section of a clarinet. It connects the mouthpiece (the sound generator) and the upper-joint (the resonator). The barrel cures the tone and influences the tuning of the other parts of the instrument. The standard length of a barrel is 67 mm. for the B-flat clarinet and 66 mm. for the A-clarinet. Nevertheless, professional clarinetists always own several distinct barrels with different measurements from 64 mm. to 68 mm., in order to facilitate tuning at different temperatures or with various instruments. To avoid "easing off" too much on the barrel while adjusting the tuning, which may cause the instrument to lose air at the upper joint nearest the mouthpiece affecting the quality of tone, clarinetists have no choice but to prepare barrels of different lengths to accommodate the tuning. For example, when a clarinetist wants to pick a barrel for a proper pitch, the length of a barrel could be over 67 mm. if the temperature is above 75 degrees Fahrenheit, and shorter than 65 mm. if the temperature is under 60 degrees. David Hite suggests another good reason to prepare different lengths of barrels: "New instruments which have not yet been 'played in' are generally slightly lower in pitch, because they have more resistance. As they are played and

become freer, their pitch will rise slightly. Consequently, a 66 mm.-length barrel is customary in the beginning of the instrument's cycle. The A-clarinet usually will need a 65 mm. barrel in the beginning."[76] It is therefore appropriate to have a one-mm. variance from the normal length mentioned above. Mr. Moses, follows the same practice, which makes it easier for him to adjust tuning during performances.

Barrels can be made of aluminum, white pine, rosewood, deep rosewood, hard rubber, plastic, Grenadilla, or ebony. Grenadilla and ebony are the favorite materials used to make barrels. Barrels made of these two substances sound better and hold pitch better than those made of other types of wood. Unlike barrels made of rosewood, which makes the sound seem wide and fat, Grenadilla barrels create a light and focused tone. The color of Grenadilla is light brown, while ebony is black. Buffet uses Grenadilla more often than ebony in their barrels.

Aside from holding barrels of different lengths in reserve, clarinetists also keep several made of distinct materials, choosing the best one to match the tone color required by the repertoire, to fit the mouthpiece or bell being used, or as mentioned above, to provide proper tuning in different environments. Some barrels have a metal plate at both ends (where the barrel connects to the mouthpiece and to the upper joint) to prevent air leaks. If the pitches that can be produced using one barrel are within a reasonable limit, the clarinetist uses a set of tuning rings in different ranges to adjust the pitch more precisely if it were to change during performances.

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[76] *Shop Talk, Moennig Clarinet Barrels*, January 27, 1998, "The J&D Hite Site" on the Internet.

In general, a barrel should enhance the instrument, smoothing out the intonation so it will be equal on all levels. Also, a barrel should have the same resistance as a mouthpiece or even the bell, letting air pass gently through the instrument. There are artisans who make barrels to fit special mouthpieces and instruments at the request of performers. A notable example of a special barrel is the reverse-conical Moennig barrel, made by W. Hans Moennig. It is generally believed that Ralph McLane, the principal clarinetist of the Philadelphia Orchestra in the late 1940s, experimented with the Moennig barrel during that time. The measurement of the Moennig barrel bore for a B-flat clarinet is 0.589" at the top, tapering down to 0.580" at the bottom, while the corresponding measurements for the A-clarinet would be 0.004" smaller. Moennig barrels are basically suitable for the 14.65 mm.-bore R-13 clarinet of Buffet, with a mid-open mouthpiece. Gigliotti, Portnoy, and Opperman also make barrels for themselves.

6. *The Relationship (Setup) among the Parts of the Clarinet*

A clarinet can be separated into the following parts: mouthpiece, reed, ligature, barrel, upper joint, lower joint, and bell. As previously mentioned, most clarinetists will not frequently change the setup of their clarinets. However, from time to time, they will try on different mouthpieces, reeds, and ligatures in an attempt to acquire a more attractive tone color.

Leon Russianoff has some important advice regarding the way to find the best setup of the clarinet. He believed that one could alter the tone color of the

instrument by changing the position of the barrel and bell. He stated:

> Find a permanent, best sounding line-up of the barrel joint in relation to the top joint by rotating the barrel about 20 degrees and testing each time. Mark the line-up of the two or three best positions by corresponding lined-up dots on barrel and upper joint. Ditto as above with bell joint. Now you can actually set the clarinet each day so the entire body is always lined up in its optimum position for the best sound and pitch."[77]

Although the current musical environment appears to be more open and fluid than it was fifty years ago, professional clarinetists still tend to build their careers by performing a particular style of music, rather than by playing the entire clarinet repertoire. For example, the classical orchestral player Anthony Gigliotti will not play jazz in public, the soloist Charles Neidich rarely plays as an orchestral clarinetist, and David Krakauer currently plays more Klezmer and jazz music. Orchestral, chamber, ethnic, or jazz musicians all need to adjust their instruments to meet the specific demands of their repertoire. Clarinetists must develop different setups for their personal instruments. David Krakauer's situation illustrates this principle. He said,

> I actually use different setups when I play Klezmer music and jazz. I use a

[77]The Clarinet, February 1974, p. 5.

different setup, including mouthpieces, reeds, and brands of instruments for the different tone colors I need to play in Klezmer, chamber music, or jazz, or to play with bass clarinet. I have used a very old Charles Bay mouthpiece since I was sixteen years old. This mouthpiece has a certain power that speaks easily in Klezmer music. It has a medium open facing and I use #3 or #3-1/4 of Rico reed with it. Currently I play classical pieces with a Vandoren B45.13 mouthpiece, with a Rico Thick Black Grand Concert reed of #4 or #4-1/4.[78]

Although many clarinetists have claimed that they would not change their instrument setup for the purpose of playing various types of music, they still always possess several different mouthpieces, barrels, ligatures, or even instruments. Since a new professional clarinet costs around $3000, clarinets are among the least expensive of musical instruments as noted above. This relatively low cost allows clarinetists to experiment with different mouthpieces, ligatures, reeds or barrels, or with different models of the instrument with a minimum financial investment.

[78] Said during interview.

Chapter VI: Twentieth-Century Clarinet Techniques

The so-called "twentieth-century clarinet techniques" are techniques that are popular and frequently used in this century but were rarely utilized before this time. They include glissandi, multiphonics, flutter-tonguing, circular breathing, and vibrato. Vibrato and circular breathing can be applied to any clarinet piece according to the performer's personal taste—including music composed in the Classical and Romantic periods. On the other hand, glissandi, multiphonics and flutter-tonguing are used exclusively in twentieth-century music.

1. *Glissandi*

Glissandi are produced by a combination of embouchure and fingering. To master this technique, players need to practice loosening and re-strengthening the embouchure, as well as withdrawing and putting the clarinet back into their mouths. Simultaneously, players need to slide their fingers on the keys. In essence, glissandi require sliding fingers and the relaxation of the lip and jaw. When playing glissandi, the player must move the fingers slowly one by one from the bottom, to play the pitch through the microtonal intervals of a whole tone. Then he or she should blow air while loosening the muscles of the embouchure. For example, when one plays a high C [C"] one must have the ability to move the pitch a major third lower by loosening the muscles surrounded one's lip. If a player cannot do this (moving the pitch as described) or has trouble bending notes, he or she may experience difficulty while playing glissandi.

The best example of a piece of music that requires the use of glissandi is the opening solo of *Rhapsody in Blue* by Gershwin.[79] To play this solo, the player may start with very loose embouchure muscles—without tension—then gradually increase the tension of these muscles while going up the scale. Students can play this glissando with a 'loose-pitch' chromatic scale from the bottom to [B'], then make the glissando thereafter by sliding their fingers to the high [C"]. Alternatively, they can practice the entire section with a single glissando. It is easier to play glissandi in certain keys than in others, especially those in which the fingers are on the holes instead of on the keys. Glissandi are also affected by dynamics. Clarinetists whom I have interviewed all agree that it is very hard to play glissandi when one is playing extremely loud or extremely softly.

Aside from jazz musicians, there are many clarinetists playing glissandi since more classical repertoire now demands it. For example, the end of Copland's *Concerto* and the third movement of the *Sonatine for Clarinet* by Arthur Honegger both require clarinetists to play glissandi.[80]

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[79] George Gershwin was born in 1898 in Brooklyn, New York, the son of immigrant parents. Gershwin wrote his first, largely successful, musical piece, *Rhapsody in Blue*, for the Paul Whiteman Orchestra in less than three weeks. It was premiered in New York's Aeolian Hall in 1924. It was written for a "swing band" with solo piano, which George Gershwin himself played at its premiere. Among Gershwin's other compositions, *An American in Paris* is a tone poem that takes the listener to the streets of Paris during the 1920's. Another of his works, the first true American opera, *Porgy and Bess*, closed shortly after opening since its poor showing at the box office failed to cover the show's cost. However, it was later adapted into a motion picture and is one of the most successful operas in the United States today. "Bess You Is My Woman Now," "Summertime," and "I Got Plenty of Nuttin'" are three of the great songs from what has become an American masterpiece. Other famous popular songs written by Gershwin include "Someone to Watch Over Me," "I Got Rhythm," and "Our Love Is Here To Stay." George Gershwin's life was tragically short. He died of a brain tumor in 1937.

[80] Aaron Copland (1900-1990), one of America's greatest composers, was born in Brooklyn, New

Mr. Portnoy once said, "In any symphony orchestra that I played in, we always hired a jazz clarinetist to play the *Rhapsody in Blue*, because I would require a break in the middle of this solo." This statement may surprise many of today's young clarinetists. They may ask the question: "How can someone become a competent orchestral clarinetist if he or she is not able to play the solo section of *Rhapsody in Blue*?" As I mentioned in Chapter I, the musical environment has changed considerably since the 1950s. As a classical orchestral player of that period, Mr. Portnoy did not have any immediate need to learn how to play glissandi because it was perceived as a jazz technique that classical clarinetists refrained from using. Today, the solo of *Rhapsody in Blue* is one of the standard audition pieces used when an orchestra selects a clarinetist.

2. *Multiphonics*

Multiphonics have become an important clarinet technique since the middle

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York. In the summer of 1921, he traveled to the American Conservatory at Fontainebleau to study with Nadia Boulanger; and became her first American composition student in France. Three years later, he turned to New York, and composed the "Symphony for Organ and Orchestra", premiered at Carnegie Hall with the New York Symphony Orchestra, under conductor Walter Damrosch. His early compositions, such as "Music for the Theater" (1925) and "Piano Concerto" (1926), were influenced by jazz rhythms" The late 1930s and early 1940s were Copland's most productive years, when he used elements of American folk music in such works as the ballets 'Billy the Kid (1938),' 'Rodeo (1942),' and 'Appalachian Spring (1944).' His film productions include *Of Mice and Men* (1937), *Our Town* (1940), and *The Heiress* (1949). Additional works of this period include 'Lincoln Portrait (1942)' and 'Concerto for Clarinet' in 1946. 'Proclamation (1982)' was his final work, performed during a concert celebrating his 85th birthday, later he died on December 2, 1990. Publications include *What to Listen for in Music* (1939), *Music and Imagination* (1952), and *Copland on Music* (1960). Copland received more than 30 honorary degrees, and in 1945, he won the Pulitzer Prize for Music.
Born in France, Arthur Honegger (1892-1955) was a founding member of the French group of composers known as *Les Six*. Honegger features a jazz style in the final movement with a quick glissando in this Sonatine.

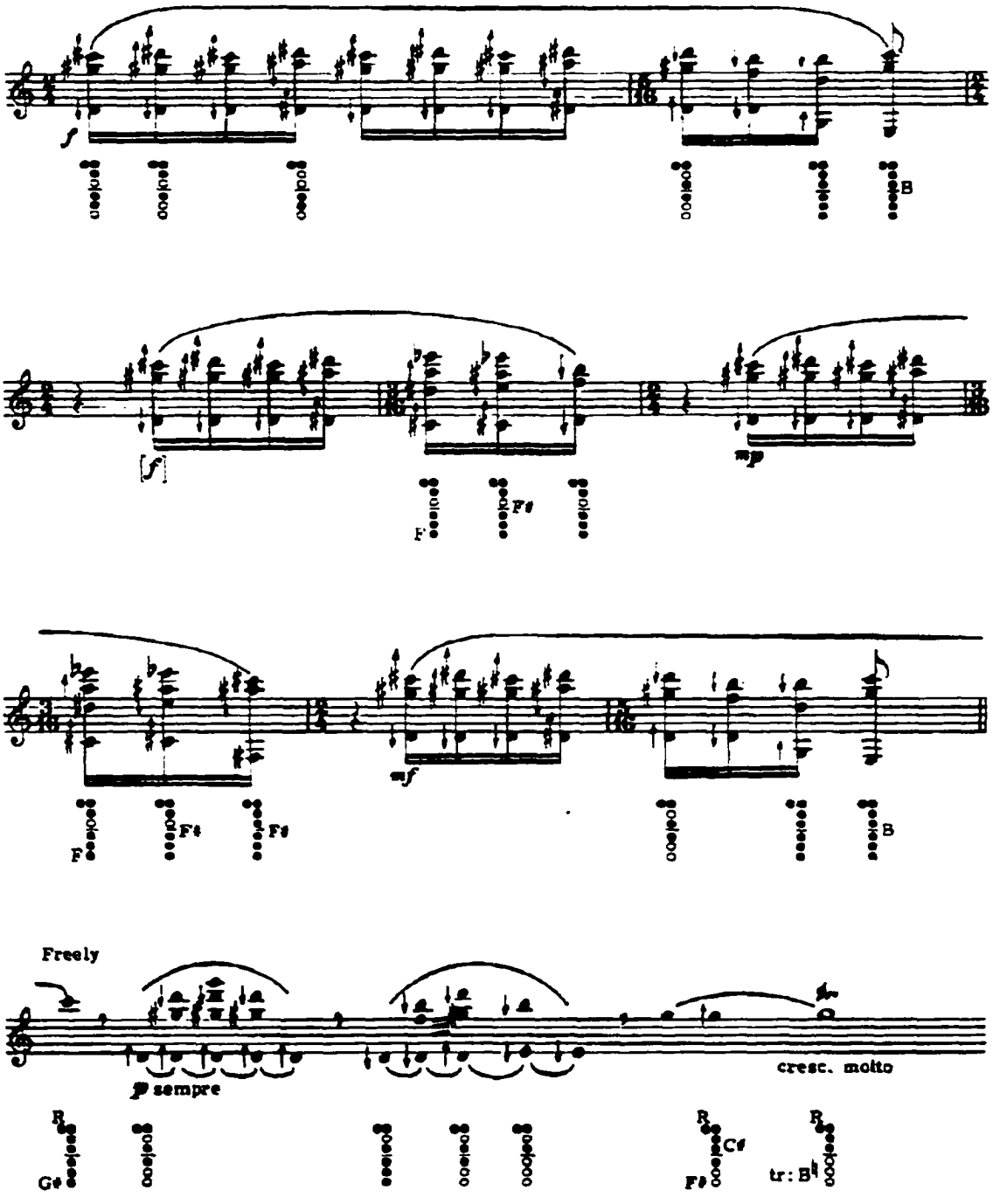
of this century. Music that calls for the use of multiphonics includes John Eaton's *Concert Music for Solo Clarinet* (1961), Donald Scavarda's *Matrix* (1962), and recent work by artists such as William O. Smith, Hans Lemann, and Elliott Carter. In essence, multiphonics involves playing more than one note simultaneously. The clarinetist plays the primary note and carries another note or notes in different partials by adding or removing one or more fingers. Some illustrations of multiphonics, from the *Contemporary Techniques for the Clarinet*, by Frank Dolak (1980), are shown on the next page in Illustration 14.

There are two types of multiphonics. One type involves splitting a regular fingering in one register by altering the embouchure to produce a selection of its harmonics simultaneously. The other, and also the more popular type, is achieved by special fingerings that allow several pitches to be produced. Gerard Errante Farmer offers an interesting description of multiphonics: "Multiphonics are generally divided into two categories: a multiple sound, producing a rather raspy, raucous sonority, whether or not all the pitches can be clearly defined; and a split tone, usually more gentle in quality, where two distinct pitches may be detected."[81]

Multiphonics are produced by fingerings and changes in the blowing pressure. While this technique is not in itself difficult to execute, it is hard to play a series of multiphonics continuously. Multiphonics require clarinetists to loosen their embouchure. Players must first release the pressure then find the right

[81] The Clarinet, Feb. 1976, p. 5.
Gerald Farmer was assistant professor of Music at West Georgia College in Carrollton in 1983. His publications include *Multiphonics and Other Contemporary Clarinet Techniques*, Shall-U-Mo Publications, PO Box 2824, Rochester, NY.

Illustration 14. Excerpt from the Contemporary Techniques for the Clarinet, by Frank Dolak.



position to blow. When applying multiphonics, clarinetists will often feel that they are losing control of their clarinet or that they are squeaking. In fact, they are basically playing the overtones above or below the primary note by opening or covering certain holes or keys, in addition to the regular fingering. It might be easier for clarinetists to play multiphonics if they change to a slightly softer or harder reed, depending on the mouthpiece being used. Gerard Farmer recommends using "a lighter reed for more freedom of response"[82] with "a less firm 'pucker' type embouchure,[83] a more open oral cavity," when employing this technique. However, Phillip Rehfeldt suggests using "a reed of moderate strength, flat on the back, well balanced for maximum resonance, and capable of at least a high b".[84]

Judging from the conflicting opinions presented above, it seems that clarinetists have to find for themselves the best combination between their mouthpiece and their reed when playing multiphonics.

When composers write multiphonics for clarinets, they take a risk: sometimes the fingerings written by the composer will not work on all clarinets. Italian clarinets with a low E-flat, Oehler-system clarinets, and French-system clarinets all respond differently to multiphonics. Consequently, players must sometimes find the fingering themselves. When writing multiphonics, composers

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[82] The Clarinet, Feb. 1976, p. 6.

[83] This means a rather forward embouchure with relaxed facial muscles; it is similar to the shape when players pronounce [Yu].

[84] *Multiphonics For Clarinet*, The Clarinet, Feb. 1976, p. 9.
Phillip Rehfeldt (b. 1939) graduated from the University of Arizona and Mount Saint Mary's College, then received a DMA in Clarinet Performance from the University of Michigan. His clarinet studies were with Samuel Fain, Kalmen Bloch, and William Stubbins. He has received a University Faculty Research Grant in the area of comparative woodwind performance.

must check the fingerings carefully while at the same time leaving the performers free to use different fingerings to play the same multiphonic notes. In fact, composers such as Boulez and Gistelinck merely indicate the harmonic above the primary note in their music. Clarinetists must find the fingering that will produce the effect written on the page. F. Gerard Errante said,

> Although the fingerings and pitch content of all the multiple sonorities have been tested extensively by numerous clarinetists, there can be no claim of universal application. Differences in embouchure, throat position and air pressure are highly individual matters and make consistent execution somewhat unpredictable.[85]

Through experimentation, I diagramed the multiphonic possibilities of my clarinet as shown in Illustration 15. I added or reduced the following keys or notes with the regular fingerings from the bottom E to central C. They are: the central C-sharp key; the right-side B-flat key (R-Bb); the right side B-natural key (R-B); the left hand index finger (L-In); the left hand middle finger (L-Mi); the left hand A key (A); and the left hand (Ab) key. The equipment I used included a Johnston mouthpiece, a softer Vandoren regular 3-1/2 reed, a Moennig barrel, and the 'Festival' model of Buffet.[86]

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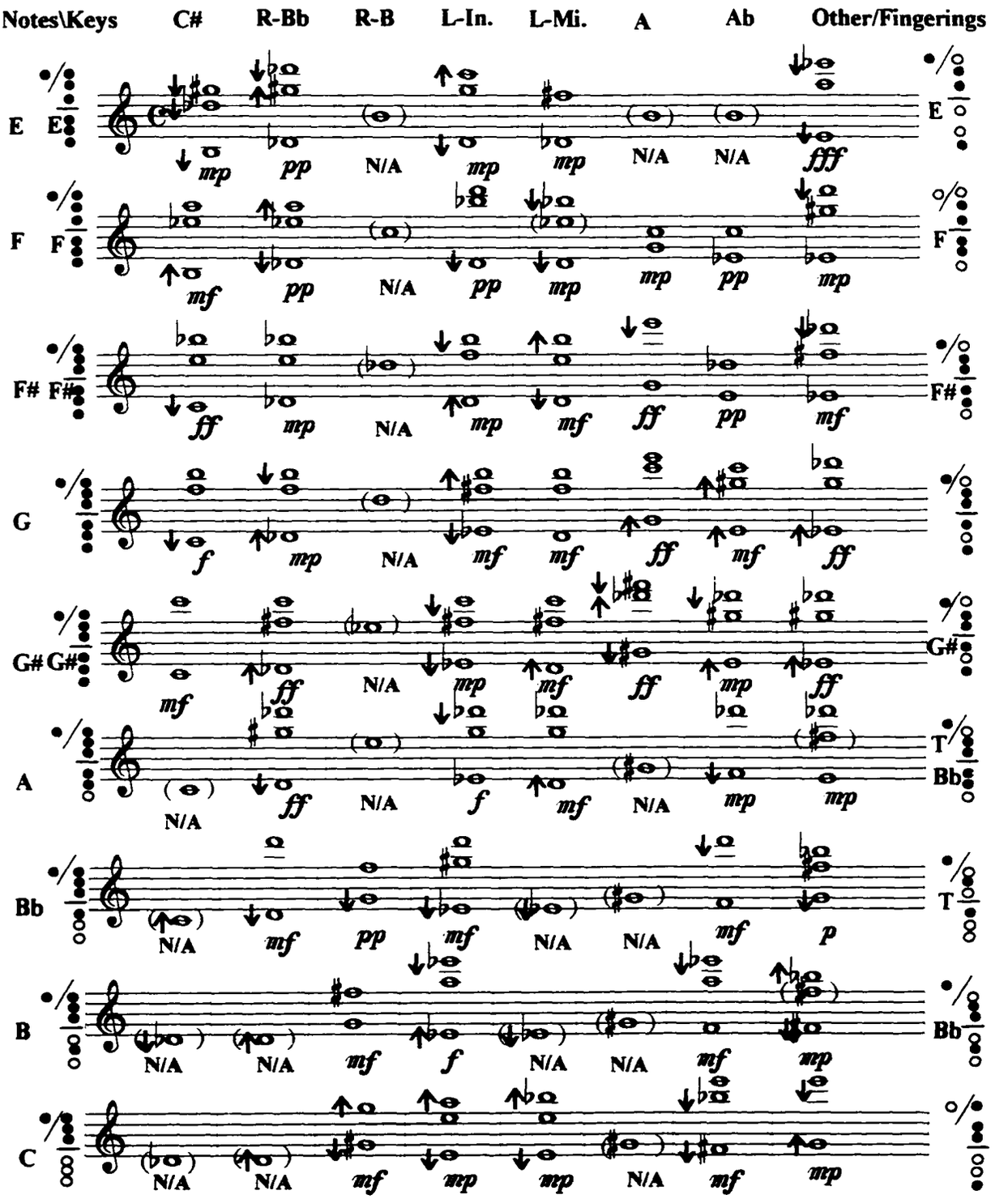
[85]*The Contemporary Clarinet* , ClariNetwork, Winter 1983, p. 20.

[86]There are a few important things about this chart:
1: All of the abbreviation and signs are as follows:

To play multiphonics, a clarinetist must have a flexible embouchure and possess well-controlled breathing. These two qualities are the basic requirements for playing both multiphonics and glissandi. A clarinetist who cannot bend pitches, play a large dynamic range from *ppp* to *fff*, and adjust intonations with the embouchure cannot perform multiphonics and glissandi gracefully. Some clarinetists, such as Charles Neidich and John Moses, play multiphonics frequently. Of the musicians I interviewed, those who use this technique during their performances include Stanley Drucker, Alan Kay, and David Krakauer, along with Neidich and Moses.

(1)Fin. from E to C: The normal fingering from the bottom E to Middle C on clarinet.
(2)C#: To open the C# key by the left little finger.
(3)R-Bb: To open the right hand Bb key by curving the right index finger.
(4)R-B: To open the right hand B-natural key by curving the right index finger. In some fingerings of the lower notes, it is not possible use the right index finger to touch this key. For example, how does a player play the third multiphonic column in line #7, that combines the normal Bb fingering plus the right side B key? I solved this problem by using the right middle finger to replace the right index finger for the Bb fingering. I then used my right index finger to touch the right side of the B key. I used the same method in another situation which involved the right side B key.
(5)L-In.: To open the hole covered by the left index finger.
(6)L-Mi.: To open the hole covered by the left middle finger.
(7)A: To open the A-key by left index finger.
(8)Ab: To open the Ab-key by left index finger.
(9) Other: To show other possibilities with related fingerings.
(10) Arrows up or down(↑↓): To indicate the pitches that are sharper or flatter than usual.
(11)All dynamics inuicate the best result for each multiphonic.
(12)(note): All notes in ( ) indicate a barely heard pitch.
(13)N/A: To indicate a non-multiphonic result.
2:The way to play the above fingerings: for example, in line #4, the regular G fingering plus the opened C# key will produce a multiphonic contains notes C, 'F', and B'. This multiphonic can be played as the dynamic *f*'. The pitch of the bottom C is relatively flat. Another example, as in the line #3 with opening the left index finger, will produce a D', F", and B" multiphonic on the dynamic *mezzo piano*.

Illustration 15. Multiphonics Possibilities.



3. *Vibrato*

It would be silly to ask a violinist or a flutist to play without vibrato. For a clarinetist, however, the question of whether or not to use vibrato becomes the subject of heated debate. During the 1950s, classical clarinetists believed that the tone produced by their instruments should be plain and straight. At that time, Robert Willaman denounced the use of vibrato in his book *The Clarinet and Clarinet Playing*, published by Carl Fischer in 1954. In the last ten to fifteen years, however, an increasing number of clarinetists are trying to perform with a more colorful tone by employing vibrato. Among the musicians I interviewed, Alan Kay, David Krakauer, John Moses, and Charles Neidich use vibrato during their performances. The same trend also applies to using vibrato in recordings. Richard Stoltzman, for example, used vibrato when he recorded the Brahms *Clarinet Trio* with Yo-Yo Ma and Emmanuel Ax.

Actually, clarinetists have been using vibrato for a long time. During the nineteenth century, both Mimart and Mühlfeld may have used it to enrich the tone color of their instruments.[87] However, clarinetists who lived in the United States at the beginning of this century did not employ this technique. Even the great clarinetist and teacher Bonade, who came from France and studied with Mimart, did not use any vibrato. Vibrato was treated as a matter of individual preference, unlike a standard technique that mentors always teach their students. Bernard Portnoy once claimed:

[87]See also in the third section of Chapter VII, the "Brahms Clarinet Music" section.

I have never used any vibrato. I am not from that School. You only need the life of your sound, by projecting your air properly. When you have that kind of sound you do not need to play with vibrato. Vibrato to me sometimes means being never in tune. For me vibrato is not necessary.[88]

Mr. Portnoy's opinion demonstrates that it was very important for a classical clarinetist in the 1950s to perform with a good, straight sound,—a woody sound. At that time, vibrato was treated as a style that only jazz players such as Benny Goodman or Artie Shaw used.[89] Nevertheless, there were exceptions to this rule. For example, Reginald Kell, the famous classical clarinetist with whom Benny Goodman studied when Goodman was already in his late forties, employed vibrato for phrasing, dynamics and overall concept of music. "Kell was one of the few orchestral clarinetists to use vibrato. He had a small, light sound, and used a lot of rubato. American players get a big, dark resonant sound."[90] He used vibrato in phrasing with tenutos, ritards, and accelerandos, as well as on important structural notes. Although many of his contemporaries may not have agreed with

[88]Said during interview.

[89]Artie Shaw, clarinetist and big-band leader, was born in New York City in 1910. He made his professional debut with Johnny Cavallaro, Joe Candor and Austin Wylie. He played in Irving Aaronson's band between 1929 and 1931, free-lanced in New York City, working at CBS and making numerous recordings. In the spring of 1937, Shaw formed a band with the conventional swing instrumentation: five brass, four saxes and four rhythm. He recorded "Begin The Beguine" with this band, in July 1938. This recording brought him a national reputation and made him a rival for Benny Goodman's "King of Swing" crown. His semi-autobiographical and semi-philosophical book, *The Trouble With Cinderella*, was published in May, 1952, by Farrar, Straus and Young. He won the Esquire Armed Forces Gold Award 1944.

[90]James Lincoln Collier: *Louis Armstrong: An American Genius*, pp. 265-66.

his approach, Kell was a well-educated and accomplished musician with an unique way of playing clarinet.

The former principal clarinetist in the New York Philharmonic, Simeon Bellison, once claimed that he would never allow his pupils to play with vibrato. Nevertheless, Bellison performed with a beautiful vibrato when he premiered his arrangement of Mozart's *Concert Rondo* on the radio, illuminating the trend of clarinet performance for the next several decades. Just like glissandi, vibrato was excluded from the world of classical music before the middle of this century. Nevertheless, players now use vibrato to enhance the sound of their instruments and to produce a more colorful tone. Like glissandi, vibrato is used in contemporary music. Boulez's *Domains*, Stockhausen's *In Freundschaft* (1977), Berio's *Sequenza IX* (1980), and Penderecki's *Prelude* (1987) all demand that the clarinetist play vibrato in certain sections. In Stockhausen's piece, the vibrato moves from a single note to a trill. To play this section well, one needs to have perfect control of lip-jaw vibrato. Today, many clarinetists treat vibrato as an important tool to achieve an interesting tone color, just as flutists, oboists, or even string players do. Vibrato has become part of the sound in the clarinet repertoire and clarinetists are becoming accustomed to it.

Some contemporary clarinetists use vibrato in any piece. Clarinetists will use vibrato in expressive phrases in the music of Weber, Mozart, or Brahms to create a warmer clarinet tone. This practice is especially appropriate when clarinetists perform with string players in a chamber setting. David Glazer uses

vibrato in music written during the Classical and Romantic periods. He started this practice after joining the New York Woodwind Quintet in the 1950s (see the second section in Chapter I). Richard Stoltzman also uses vibrato while playing traditional clarinet repertoire such as the Brahms *Clarinet Trio*, as mentioned previously in this chapter. Mr. Stoltzman grew up in a family that enjoyed listening to popular music. Besides appreciating the classical repertoire, they also loved listening to big band, jazz, etc. Early exposure to a wide variety of musical styles made Richard Stoltzman love different types of music. This experience influenced his career as a performing artist; as a result, Mr. Stoltzman would never insist on playing and recording "purely" classical pieces, such as music written by Mozart, Weber, or Brahms, with a straight sound. He uses vibrato very naturally as part of his performing style.

The introduction of vibrato makes the concept of a "good clarinet tone" more difficult to define. Stanley Drucker said: "Good tone is usually the one that fits with the pattern in an ensemble or fits with another instrument like the oboe, flute, or others." Since other woodwind players, such as oboists, flutists, and bassoonists all use vibrato, then why do clarinetists refrain from using it? Using vibrato will be likely to add interest to the clarinet performance. Playing with vibrato will allow clarinets to increase their volume at appropriate passages and become more expressive with emotional phrases. Using vibrato is a matter of individual taste; nevertheless, it must be appropriately employed.

To play vibrato, one can use hand-vibrato like the trumpeters, diaphragm-

vibrato like some flutists and singers, or throat-vibrato and lip- or jaw-vibrato, as many clarinetists do. To practice and improve vibrato, a player can set the metronome to 60 beats per minute, then play two eighth notes per beat (or one vibration per second) on the same pitch and with the same motion, by adding and loosening the pressure on the reed. However, the clarinetist must be careful not to exaggerate too much or else he or she will produce a squeak. Once that motion is smooth, the player can gradually increase the speed until they are playing 120 triplet sixteenth-notes per minute (at a metronome mark of 60, or six notes per beat), using either lip- or diaphragm-vibrato. By doing this exercise, clarinetists will have practiced the entire range of vibrato one can use. Vibrato grows out from the center of the sound; it always starts from the middle of the note. It should be played during a meaningful phrase and can be treated as a form of musical expression.

4. *Circular Breathing*

Circular breathing is an old technique whereby the player squeezes the air from the cheeks and takes a breath through the nose at the same time, just as a glass blower does. While using circular breathing, clarinetists can play endless phrases by continuously blowing out air. This technique has been popular for thirty to forty years; many oboists employ it frequently. Furthermore, some clarinetists, such as Charles Neidich, always use circular breathing in their performances. Nevertheless, the issue of where to apply this technique is still the subject of

debate. For example, clarinetists often disagree about whether or not to use circular breathing in the opening phrase of the second movement of the Nielsen *Clarinet Concerto* (see Illustration 21, in the fifth section of Chapter VIII).

Theoretically, players can easily practice circular breathing with a straw in a glass of water: while they are blowing air into the water, they can take a breath through the nose. Nevertheless, it is difficult to blow the air steadily and consistently. David Krakauer recommends the following steps as a good way to learn circular breathing:

Step 1: Fill your cheek with water and push the water out with your hand.

Step 2: Fill your cheek with water. While you push the water out with your hand, you take a quick sniff.

Step 3: Fill your cheek with water. While you push the water out with your cheek, take a quick sniff. You can practice this step while brushing your teeth. This exercise will give you an idea of circular breathing.

Step 4: Place your clarinet on and use air instead of water to do 'Step 3.'[91]

Circular breathing produces the best results on trills, tremolo, or running passages in the middle range of the clarinet, and thus, is most appropriate to use in these situations. Although circular breathing can be used in every type of music, in

[91] Said during interview.

order to avoid having an insufficient supply of air, clarinetists should be careful to employ it only to enhance the musical content of their performances, not to astonish the audience. One example where circular breathing could be appropriately applied is in the *Clarinet Concerto* No. 2 by Ludwig Spohr.[92] The places where it is possible to apply circular breathing are shown on the next page in Illustration 16.

The Spohr *Clarinet Concerto* contains many passages that require a longer air supply than most clarinetists have. Charles Neidich suggests that Simon Hempstept, the clarinetist Spohr wrote the *Concertos* for, played with circular breathing. It is reasonable to suppose that players of that period imitated glass blowers and played with circular breathing, thus offering composers the possibility of writing music that required a long air supply. Based on this speculation, one can surmise that circular breathing may have been used for over two hundred years.

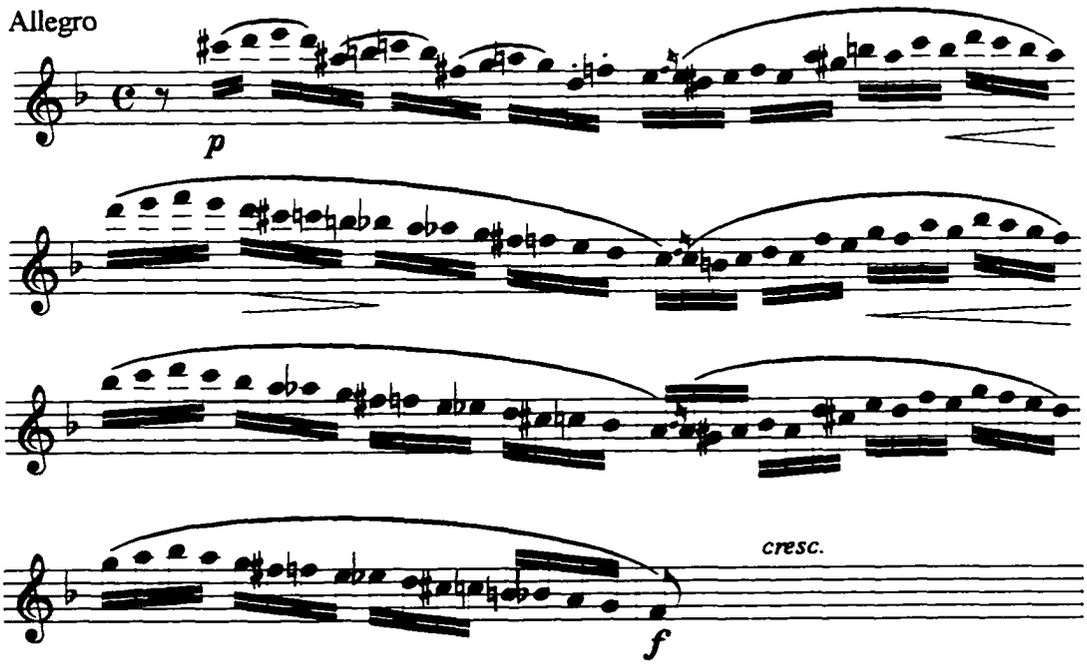
It is not appropriate to use circular breathing in a melodic phrase. When clarinetists play a melody, the circular breathing will create a gap, however small, in the phrase that will make the melody sound different or imperfect when compared to a phrase articulated with a normal breath. Even when Mr. Neidich applies this technique, he only uses circular breathing when there is a dynamic

[92]Ludwig Spohr (1784-1859) was famous in the 19th century as a composer and a superb violinist. His contributions to the history of music included: invention of the chin-rest for violin(ists) and early use of a stick (baton) in conducting; He was an advocate of the Romantic habit of traveling (touring), and is also the person all musicians should thank for employing standardized letter markers, or rehearsal letters (numbers) in our scores.

change or a non-melodic phrase. When playing the works of Mozart or Brahms, it is better to take a breath as a singer would. Ronald Roseman once made this appropriate comment: "As wind players we are sometimes embarrassed about breathing, but singers are never embarrassed about breathing—they know they need to breathe and they are going to breathe. So why don't wind players take a breath?"

Illustration 16. Ludwig Spohr Clarinet Concerto No. 2.

An Example of a Passage to Be Played with Circular Breathing, First Movement, after Letter "D," the Belwin Mills edition.



Although circular breathing is a technique that has certain appropriate applications, clarinetists should be aware of the danger of using it indiscriminately. They should employ this technique only when it is necessary, while refraining from using it in emotional or melodic passages.

5. *Flutter-Tonguing*

Flutter-tonguing is occasionally required by composers. It is a necessary technique that contemporary clarinetists should master. There are basically two ways to play flutter-tonguing. One method is to flutter the top of the tongue against the roof of the mouth just as one would pronounce the Italian [R] syllable (front-flutter). The other method is to vibrate the back of the tongue, just as if one were gargling water (back-flutter). The former method is better than the latter for creating a real flutter effect. For example, it is more appropriate to play the flutter-tonguing in the second movement of Peter Maxwell Davies's *Hymnos* using a front-flutter, since back-flutter usually cannot provide a sufficiently loud volume in the extreme registers. When a composer requests a flutter-tonguing, the execution of the flutter is more important than the tone color of clarinet. Therefore, the front-flutter, which provides a louder volume, is the proper one to use.

Unfortunately, people who cannot naturally flutter their tongues have to resort to using the back-flutter. There are some players who have learned the front-flutter by practicing the [duh-luh] motion with their tongues for many years. In such a case, the player must first practice the flutter-tonguing without the

instrument. After the player has mastered fluttering alone, he or she can add the mouthpiece to the mouth. When a player tries to play flutter-tonguing with a mouthpiece, he or she must relax the embouchure and blow air constantly to achieve a steady flutter-tonguing.

In a further modification of the technique, Charles Neidich plays flutter-tonguing differently in different registers, To learn his method, one must first practice shaping the embouchure in the forms of [Luh |ʌ|] and [Loo |u|]. The former one keeps the shape of embouchure more as in the syllable [Uh |ʌ|], and the latter one as in [oo |u|]. For the shape of the former one, which is used for playing the notes in the higher register, such as the notes g" and above, the player should pull back the muscles at the sides of mouth, just like one says the first syllable of "Lucky." For the latter syllable, in order to play notes in the lower register, the player should push the same muscles more forward, just as saying the first syllable of "loose." While forming both shapes, players must open their mouth cavities to allow the tongue to flutter.

There are a few things players must be careful of while playing flutter-tonguing. First, players must keep a flexible embouchure while they constantly blow air. Second, players should find the correct shape of embouchure for playing flutter-tonguing in different registers, just as Charles Neidich advised above. Finally, a player must experiment with the different relationships between mouthpiece and reed. I have found through experimentation that using a harder reed with an open mouthpiece allows for more vibration and fluttering of the reed

and tongue, making it possible to do flutter-tonguing in both lower and higher registers.

6. A Word About Stage Fright

Strictly speaking, managing stage fright is not a twentieth-century technique. Musicians have coped with stage fright throughout the history of performing. However, as technical excellence becomes more important in today's competitive music world, whatever undercuts a performer's abilities will also undercut his or her success. Any student or performer can develop stage fright, especially when using new or difficult techniques on stage for the first time. Preparation in the fundamentals of technique is important, as is understanding when to apply virtuoso techniques to achieve the right musical result.

Overcoming stage fright requires at least three steps. First, the player must know the program very well. The best way is to memorize, research, and analyze the program. Second, the player must be very familiar with the performance location, including the direction of entrances and exits, the positions of piano and performer, and the light and air-conditioning on the stage.[93] Being familiar with both music and location will help to build a player's confidence. The third and last step is most important: the player must "practice the performance." The main difference between practice and performance is that while during practice one can,

[93] Facing the vent of an air-conditioner while performing, for example will make it uncomfortable for a player to breathe.

if necessary, stop at any place because of a mistake, during a performance there is only one chance for a full run-through. How does one "practice for the performance?" There are several ways. For example, two weeks before the concert, the player can run the program non-stop twice daily at home. He or she can discover mistakes through this process, pinpointing the places where the performance is not working well. The player can also ask friends or family to serve as a "practice audience" and can later gradually increase the number of listeners to provide a more accurate simulation of the tension that will arise on performance day. The player can even run through a dress rehearsal, enacting the whole process of a performance, including bowing to the audience, tuning with the piano, and playing the entire program. And the practice should be critiqued even more severely than the final performance may be. As stated by John deLancie, "You can assume that at the performance, because the heat is on, you will lose a good fifty percent of every aspect of your preparation. Therefore, what is necessary is to be one-hundred and fifty percent prepared, so you can lose fifty percent and still have everything there."[94] By doing this run-through exercise, the player will be more likely to have a good performance.

During practice, players might develop physical problems caused by overexertion. Hand problems, breathing problems, and problems with embouchure are all potential threats. As Mr. Drucker said, "One always tries to solve problems

[94]John deLancie, principal oboist of the Philadelphia Orchestra, was a pupil and former colleague of Marcel Tabuteau.

by practicing. But one can only accomplish so much, and past a certain point, practicing is not beneficial, and that is where one's problems start."

Practicing mindlessly, mechanically, or for too long will never produce better music. One must know oneself and find the best interpretation for one's own performances. In a creative field like music, there is not always only one right and one wrong way. Tastes in solo playing, along with a sensitivity and responsiveness to beauty and art, are aspects of the learning process that go beyond technical matters. Performance is about more than determining which fingering one is going to use, or thinking about reeds, mouthpieces, or clarinets. It is also about determining what one wishes to sound like, what one hopes to convey, and how one can communicate best with the instrument. The best performance is the one that the player, as well as the listener, finds memorable.

Chapter VII: Changes in Interpretations of Standard Clarinet Music

As the world changes, so does musical interpretation. When composers write their music, they usually have an idea about how this music should be performed. If the composer were a good editor like Brahms, he or she would clearly specify all of the intended articulations and musical gestures in the manuscript. However, if a composer were like Mozart, who did not carefully note the way he intended the piece to sound, then musicians must try to interpret the music on their own (unless they have a way of communicating with the composer). For example, Mozart's *Clarinet Concerto* was never performed during the composer's lifetime. When it was premiered after Mozart's death, it may have assumed a somewhat different image than the one that the composer had in mind.

Controversies over proper musical interpretations exist not only between composers and performers, but also among performers. Brahms dedicated all his clarinet works to Richard Mühlfeld (1856-1907) and played with Mühlfeld on concert tours. Nevertheless, many clarinetists living in Brahms's lifetime still played Brahms's clarinet pieces according to their own interpretations. (Please refer to the third section of this chapter.) Most musicians believe that performers should not copy someone else's musical ideas but instead develop their own perspectives. As a result, various interpretations of the same music can coexist.

To explore this subject, I posed some questions about how to interpret major clarinet works to all the clarinetists I interviewed. I have provided some historical backgrounds and synthesized all of their answers into the following

sections.

1. *Would You Play Mozart's Clarinet Concerto (And Quintet) with an Extended (Basset) Clarinet?*

Based on George Dazeley's "The Original Text of Mozart's *Clarinet Concerto*," published in the Music Review, IX, p.166-172, 1948, as well as the observations of some other theorists,[95] this concerto is supposed to be played on a basset clarinet. Perhaps Lotz of Vienna made this basset clarinet especially for Anton Stadler.[96] This instrument is supposed to have contained the extended low notes of E-flat, D, D-flat, and C. Many clarinetists still have some questions about this instrument, such as: if this *Concerto* was written for Anton Stadler's special basset clarinet, why does the instrument not exist today? If Mozart were still alive, would he modify the *Concerto* according to today's instrument or musical style? Would clarinetists have the freedom to interpret the music to accommodate their own instrument?

The basset clarinet is either a basset horn in A or B-flat, or just a clarinet with extended compass to the low C. Several examples of basset clarinets have recently been discovered. One appears in a famous photo of a basset clarinet

[95]Jiri Kratochvil and Milan Kostohryz, studies published in 'Berichtüber die Prager Mozartkonferenz' in Prague, 27-31 May 1956, published by the Union of Czechoslovakian Composers, Prague 1958, pp. 262-271; Ernst Hess, 'Die ursprüngliche Gestalt des Klarinettenkonzerts KV 622, in Mozart Jahrbuch 1967, Salzburg 1968, pp.18-30.

[96]Anton Stadler (1753-1812) was the first clarinetist in Viennese Court on a regular basis. Stadler's newly invented clarinet with an extended lower range inspired the music in Mozart's Clarinet Quintet K581 (1789), Concerto K622 (1791), and *La clemenza di Tito* (1791); as well as in Paer's *Sargino*, and a concerto movement by Süssmayr (1792).

preserved in Hamburg, with a globular bell (like the bell of an English horn), made by Strobach of Carlsbad, that is pitched in A.[97] This instrument may have been made in Mozart's lifetime.[98] There are a few companies that have made basset clarinets, but Anthony Gigliotti likened the basset notes on current instrument to "the honking of a boat sailing on the Hudson River."[99]

Hans-Rudolf Stadler made the first recording of the Mozart *Clarinet Concerto* using a modern-designed basset-clarinet in 1969, with an edition prepared by Ernst Hess, in Schwann Musica Mundi VMS 807.[100] Several others musicians, including Charles Neidich and David Shifrin, followed with their own recordings. Did these recordings satisfy everyone? In general, whenever anyone is asked to play this concerto, first he or she would need a good clarinet, either the regular or the extended version. Some clarinetists object to playing this piece with the extended clarinet, claiming that they have yet to find a good one. They also doubt whether Mozart or Stadler had good extended clarinets. They do not think it is necessary to play this piece with an extended instrument since the music stands just the way it was published in 1801 and just the way it has been interpreted for nearly two hundred years.

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[97] *De Klarinet*, E. Elsenaar, Hilversum, 1927, p. 30.

[98] The rationale for this belief was presented at the 1994 International Clarinet Congress in Chicago Pamela Poulin discovered three concert programs in Riga, Latvia, presented by Anton Stadler in February and March of 1794 during the five-year concert tour throughout northern Europe to St. Petersburg. These programs include an engraving of an extended clarinet with angled globular bell, a basset clarinet which had been commissioned by a letter of Anton Stadler. One of the prominent programs performed in Riga was the *Concerto* by Mozart for the newly invented clarinet.

[99] Said during interview.

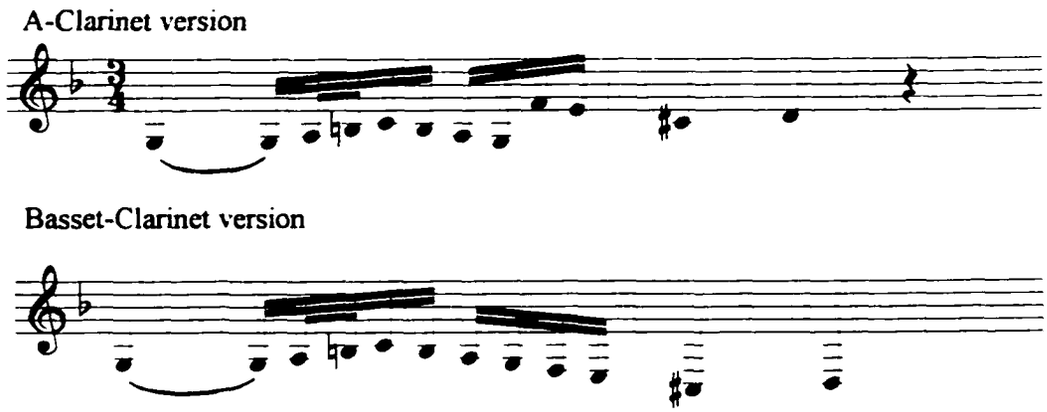
[100] Michael Bryant; *the Clarinet on Record*, The Cambridge Companion to the Clarinet, Cambridge University Press, 1995, p. 206.

Since there is no entire handwritten score for this *Concerto*, clarinetists for hundreds of years have performed and studied this piece in its A-clarinet version. Many musicians believe that this piece does not need the notes below E, and that the arpeggio go down to the low C. They think that the Concerto works perfectly on the regular A-clarinet. Kalmen Opperman also believes that performers in each time period should have the right to express their own interpretations of music. He mentioned in the interview, "I owned a Mozart *Quintet* score printed in 1830, and Mozart did not write any articulation for the piece. Clarinetists should have the freedom to interpret it with their own articulations and choose their own instrument. If the basset clarinet had a great sound, I would like to try it, but I have not yet found one with a great sound." Of the clarinetists I interviewed who do not play this concerto with basset-clarinet, however, they would not mind if their students wanted to try it. They are Anthony Gigliotti, David Glazer, Kalmen Opperman, and Bernard Portnoy.

Despite arguments against using the basset clarinet, playing this piece with an extended instrument can fascinate audiences who are looking for a new sound or an original style. Clarinetists who insist on using the basset clarinet believe that the presence of low notes make the arpeggios written in the *Concerto* more lyrical and sensible; furthermore, use of the basset clarinet also makes certain phrases more complete (Shown on the next page, Illustration 17). When compared with the piano and violin concertos written by Mozart, certain phrases in the *Clarinet Concerto* seem to make more sense if they include the extended notes. The *Neue*

Mozart-Ausgabe of this concerto, Bärenreiter, 1987, has both versions available for clarinetists.

Illustration 17. Mozart Clarinet Concerto, m. 45 in the second movement.



Some clarinetists who believe that they should interpret this piece with a more historically accurate instrument are just looking for a more reliable basset clarinet on which to perform the music. Their other concern is whether it is necessary to own a basset clarinet. It is a rather costly investment to purchase an instrument that can only be used to play two pieces by Mozart and some contemporary music. However, professional clarinetists often do not consider four thousand dollars a huge amount to spend on an instrument that somehow conveys

Mozart's original ideas. From the historical point of view, if Stadler had been as great a businessman as Iwan Müller, he might have encouraged the use of his basset clarinet and we might still use it today.

Charles Neidich, who plays both the *Concerto* and *Quintet* with the basset clarinet—and also loans one of his basset clarinets to all of his students to experiment with—strongly admires the basset clarinets made by Buffet and LeBlanc. He said:

> It is true that about twelve years ago it was hard to find a good basset clarinet, but today we can easily find a better basset clarinet from either Buffet or LeBlanc. Even more, there are makers supplying the bell alone, for playing those basset notes by connecting the bell to a regular A-clarinet.

Because of the availability of such instruments clarinetists can play low notes more easily than before. A satisfactory instrument can be found no matter if it is a basset clarinet or regular clarinet.

Among the clarinetists I interviewed, those who had played, will play, or do not object to playing this concerto with basset clarinet are Stanley Drucker, Alan Kay, David Krakauer, John Moses, and Charles Neidich.

2. *Would You Play a Cadenza at the End of C.M. von Weber's Clarinet Concertino, Concertos and Quintet?*

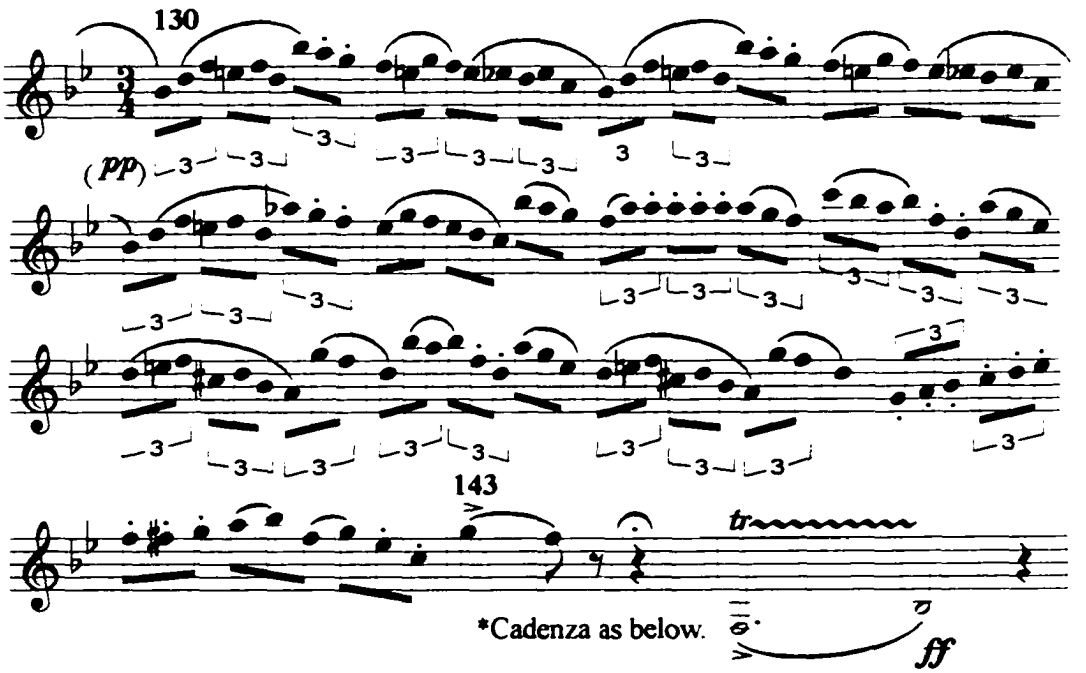
Weber's well-known clarinet pieces were composed in 1811 and mostly dedicated to Heinrich Baermann.[101] (The *Grand Duo Concertant*, however, written in 1816, may have been commissioned by Hermstedt). In these works, Weber exploited not only the technical but also the musical potentialities of the instrument. All these works, which present performers with an opportunity to show themselves at their best, have become part of the standard repertoire that all clarinetists must study today.

It seems obvious that one should play a cadenza at m. 143 in the first movement of Weber's Clarinet Concerto No.1, op.73 (shown on the next page, Illustration 18). Most of the clarinetists I interviewed, except Charles Neidich, do this. Many clarinetists not only think that Heinrich Baermann wrote a musically and technically interesting cadenza, but they also believe Baermann played it at the premiere in accordance with Weber's original concept.

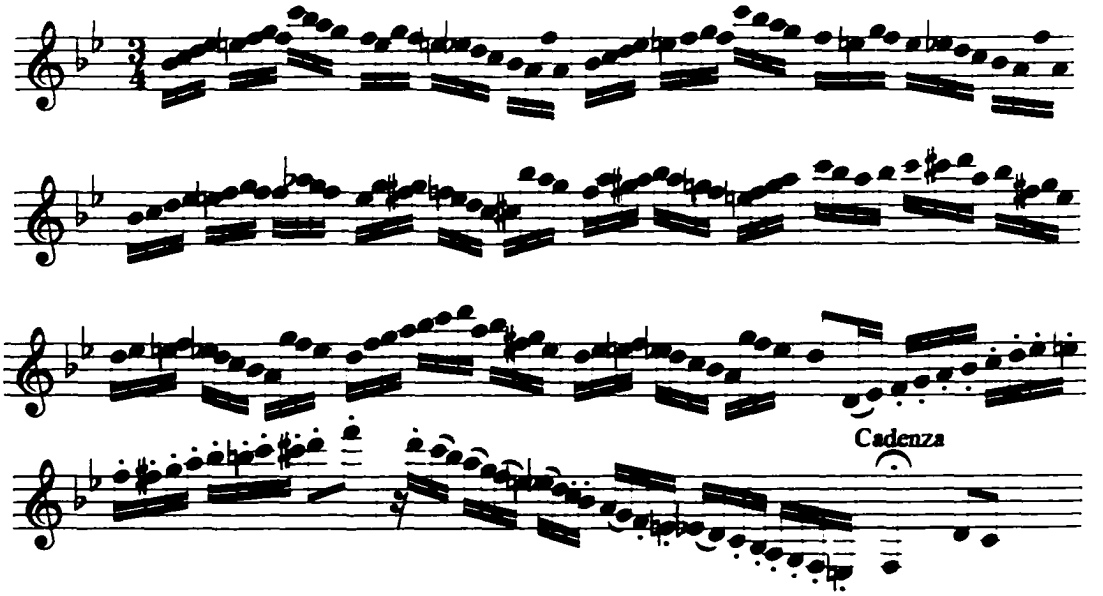
Neidich explains his reasoning against playing this cadenza: "First of all, it is not located in the right place." He thinks that Baermann had placed it too early, resulting in a lack of symmetry in the structure of the first movement. "Also, the cadenza Baermann wrote is basically a variation on the previous triplet notes. This variation does not fit Weber's compositional style. Finally, at the time, Baermann

[101] Heinrich Baermann (1784-1847) wrote many virtuosi compositions that stretch the technical limits of the clarinet. This is especially true considering that Baermann played on an instrument that was not as technically complete as are our modern instruments today.

Illustration 18. The cadenza at m. 143, first movement, Weber Clarinet Concerto. No. 1, Op. 73.



Heinrich Baermann's additional bars to m. 143, first Movement.



was a better-known performer than Weber was a composer. Weber might not have been willing to disobey Baermann's idea."[102] Regardless of what the circumstances might have been, the New Weber edition, 1987 Fentone Music Ltd., Corby, Northants, England, edited by Pamela Weston, has published Weber's original manuscript, along with the cadenza, on different sheets. Clarinetists can compare both interpretations.

Several recordings of Weber's clarinet music were made at the beginning of this century. Such recordings include one by Carl Esberger, who recorded the first movement of the F minor Concerto for the Gramophone and Typewriter Company,[103] and a performance of the *Concertino*, recorded in a shortened form by Charles Draper, in order to fit the single side of a 12" disc.[104]

Although it is a normal practice to have a cadenza, it is necessary to place one in the *Concertino* op.26. In the meantime, Baermann did not add a cadenza for this concertino. Furthermore, the place where the cadenza is usually put may not be proper (see next page, Illustration 19). However, if performers want to prolong this piece and to showcase their performance skills before the Allegro section, they can add a cadenza toward the end.

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[102]Said during interview.

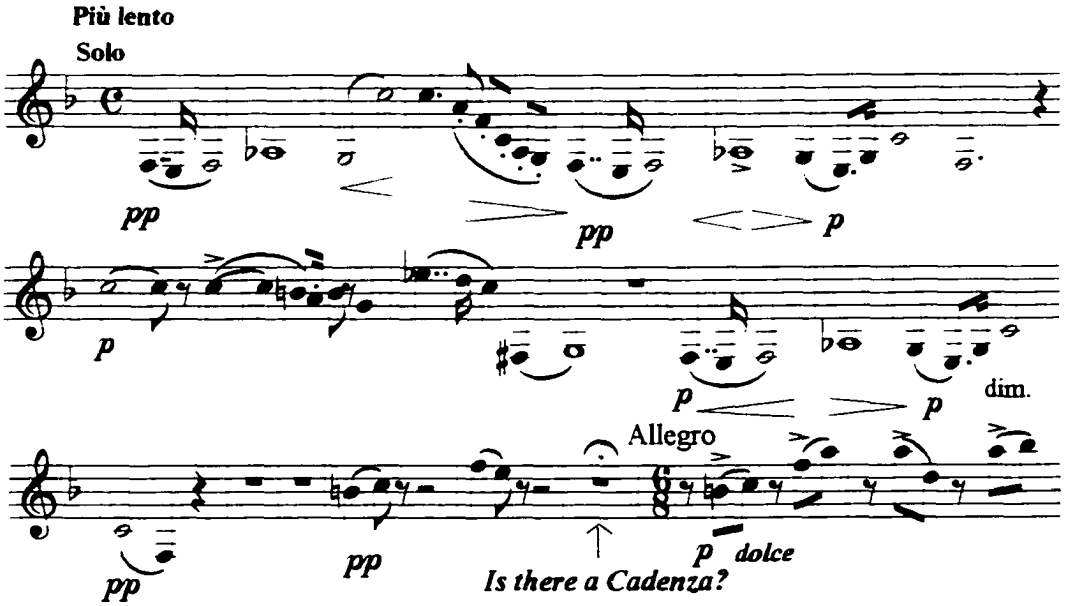
[103]GC 46055, 1907.

[104]HMV C 487; Gramophone Monarch 06000, 1906; Clarion 10006, 1909; Edison Bell 406-5730, c. 1905.
Charles Draper (1869-1952) was taught by Henry Lazarus (1815-1895), to whom George Macfarren had dedicated his obbligato songs "A Widow Bird" and "Pack Clouds Away" in the 1860s. Edward Elgar (1857-1934) admired Draper's playing and inscribed his name beside all major solos in his scores. Draper was the dedicatee of Arthur Bliss's (b.1891) *Two Nursery Rhymes* Op. 20 (1921), and Charles Stanford's (1852-1924) Sonata Op. 129 (1912).

Most of the clarinetists I interviewed would not play the cadenza in this *Concertino*, except Charles Neidich and Alan Kay.

Illustration 19. The *Piu Lento* section in Weber *Concertino*, Op. 26.

Is There a Cadenza?



3. *Would you employ vibrato in the slow movement of Brahms Clarinet Sonatas, Trio, and Quintet?*

Brahms's works are among most important in the clarinet repertoire. His compositions for clarinet are all responses to the performances of Richard Mühlfeld, who was the clarinetist in the Meiningen Orchestra. Brahms loved the lyrical beauty of Mühlfeld's performing style. The *Quintet* for clarinet and strings

that Mühlfeld performed at the end of 1891 is one of Brahms's sweetest, most poignant works. Brahms finished a *Clarinet Trio* at about the same time. Then, he wrote two sonatas for clarinet and piano in 1894. Brahms's first clarinet work was a trio that engaged this instrument with the cello and the piano on equal terms. His next project was to add clarinet to the string quartet, resulting not in a "five," but a "four-plus-one" combination. Based on what is known about the later part of the composer's life, one can surmise that Brahms intended these works to be sweet, expressive, and warm. The Brahms expert Florence May has made the following remark on the two sonatas: "The fresh, bounding imagination of youth is indeed not in them, but both works have a warmth and glow as of a sunset radiance."[105]

At first, Mühlfeld studied both the violin and the clarinet. He performed a clarinet solo for friends at the age of ten. Mühlfeld was not a virtuoso of the old school who sought to dazzle the audience with supreme fingering technique and superficial effects. Instead, his strength lay in his profoundly musical expression. It was this feature that attracted Brahms to Mühlfeld, whom he named the "nightingale of the orchestra" and "Miss Clarinet." In a letter to Clara Schumann, Brahms said: "It is impossible to play the clarinet more beautifully than Herr Mühlfeld here." Joachim, who performed both the Mozart *Trio* and Brahms *Quintet* with Mühlfeld as a violinist and violist, respectively, wrote a letter on December 16, 1891 to Sir Charles Stanford, requesting a concert in England. In

[105]Edwin Evans (senior): *Handbook to the Chamber & Orchestral Music of Johannes Brahms*, William Reeves Bookseller Limited, London.

this letter, he stated:

> The Quintet (Clarinet Quintet) of Brahms, which is one of the most sublime things he ever wrote, has a heavenly Adagio in it. Brahms is willing to have it performed in England, if we engage the Clarinet player who has done it in Berlin, a Mr. Mühlfeld from the Meiningen band, a stupendous fellow; I never heard the like of his vivacity of tone and expression... Brahms could not send the manuscript beforehand for an English player to practice, and besides there is so much of the Gypsy-style in it, I do not think they [the English players] would find the right expression.

Reflecting on Mühlfeld's tone quality, Vaughan Williams felt that Mühlfeld played more like a violinist than a clarinetist, perhaps the result of Mühlfeld's early musical experience.[106] Does this imply that Mühlfeld used vibrato to color his sound—especially since Mühlfeld was a violinist who taught himself the clarinet? Questions also surround the pitch of Mühlfeld's instrument. In a letter from Brahms to Clara Schumann written in November 1894, Brahms stated, "And now I

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[106]Vaughan Williams, born in 1872 at Down Ampney, Gloucestershire, and died in 1958. While he studied at the Royal College of Music from 1890 to 1892, he was awarded both a Bachelors and Masters of Music degree by Trinity College, Cambridge, in 1894, and subsequently a Doctorate, in May 1901. In 1897 he studied with Max Bruch in Berlin, and still later he studied with Maurice Ravel in Paris in 1908. From 1910 to 1958 he composed total nine symphonies. He both collected and made great contribution to the study of folksong.

have to tell you about something which will cause us both a little annoyance. Mühlfeld will be sending you his tuning fork, so that the grand piano with which you are to play may be tuned to it. His clarinet only allows him to yield very little to other instruments." Based upon Brahms's letter, it is clear that Mühlfeld did not play in the style of other clarinetists of that period, nor did he play with the same pitch. However, I assume that more or less all German clarinetists in that period needed mechanical adjustment on their instrument.

Mühlfeld's instrument, an eighteen-keyed Muller-Baermann system clarinet with rollers to facilitate sliding, which was influenced by Carl Baermann's clarinet from 1857, possessed a very sweet tone.[107] Bernard Portnoy once stated, "The music Mühlfeld received (from Brahms) might bring about a wave of questioning among present-day musicians."[108] However, one must appreciate the benefits Mühlfeld brought to all clarinetists as he inspired such great works from Brahms. The follows works for clarinet were all dedicated to Mühlfeld: Waldemar von Baussnern's *Serenade* (1898); Gustav Jenner's *Sonata* Op. 5 (1899); Theodor Verhey's *Concerto* Op. 47 (1900); and Carl Reinecke's *Introduzione ed Allegro appasionata* Op. 256 (1901).

Should the current generation of clarinetists play these pieces with vibrato? Different amounts or speeds of vibrato might be used because Mühlfeld might have done so. This would not have been the topic of a discussion in the 1950s,

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[107]This clarinet can be seen at the Staatliche Museum in Meiningen, Germany, where Mühlfeld played the first clarinet in the court orchestra, beginning in 1880.

[108]*Woodwind World*, February 15, 1963, p. 13.

because classical clarinetists in that period played only with a straight tone and without any vibrato. However, clarinetists today can use a little lip-vibrato combined with the diaphragm to color the clarinet tone. This will not match the vibrato that string players use, because the vibrato is basically different between wind and string instruments.

Clarinetists use vibrato differently from the way flutists do; they do not use vibrato all the time, nor do they always use the same method to create it. While playing Brahms's clarinet music, musicians who are sensitive and lyrical enough to employ vibrato will develop their own perspectives on how to use it. Among the musicians I have interviewed, those who use vibrato while playing Brahms's clarinet pieces are Glazer, Kay, Krakauer, Moses, and Neidich. Also, Mr. Drucker uses vibrato in certain places, but not in the second movement of the Brahms *Clarinet Quintet*. Since the string parts in this movement are played with mutes, Mr. Drucker thinks that the tone quality they produce is not really compatible with vibrato on the clarinet. Also, while Mr. Gigliotti does not play with vibrato himself, he allows his students to use it. While vibrato has been accepted by most contemporary clarinetists, when and how to use it is still a matter of individual choice.

Recordings of Brahms clarinet music from the first half of the century include ones made by Charles Draper, playing the *Quintet* on an electrical recording in 1929,[109] the *Trio* with Ralph McLane, while he was a member of the

[109]Reissued by Pearl, CD 9903, 1991.

Boston Symphony Orchestra, the F minor *Sonata* with Luigi Amodio for Polydor, and the Eb *Sonata* [110] with Frederick Thurston.[111]

4. *Would you employ vibrato or exaggerate the tempo change in Debussy's Premiere Rhapsodie?*

The *Première rhapsodie* by Debussy is one of the best-known clarinet *pièces de concour*. The piece demands that the musician have both great sensitivity and a total command of *pianissimo*. The Paris Conservatoire has been commissioning works for its annual contests since 1897, and Debussy's *Première rhapsodie* was one of these pieces. It was dedicated to Prospère Mimart (1859-1928) in 1910, together with the *Petite pièce* for the accompanying sight-reading test. Mimart was a pupil of Cyrille Rose and Charles Turban,[112] both of whom studied with Hyacinthe Eléonor Klosé. Mimart played with a beautiful tone using vibrato, no doubt a style of the French school. Mr. Anthony Gigliotti commented in the interview, "Mimart played with a beautiful French style of vibrato. As a matter of fact, French clarinetists of that period all played with vibrato." Therefore, Debussy probably had vibrato in mind when he wrote this rhapsody. However,

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[110]Decca. 1937.

[111]Frederick Thurston (1901-1953), was one of the most influential clarinetists for English composers. Dedications included Alan Rawsthorne's *Concerto* (1936); Elizabeth Maconchy's *Concerto No. 1* (1945); Herbert Howells's *Sonata* (1949); and many others.

[112]Cyrill Rose (1830-1902) won his first prize at the Paris Conservatoire in 1847, and became as the professor in the Conservatoire in 1876. Rose's *Forty* and *Thirty-Two Etudes*, composed in 1870s, are perhaps those most widely studied. In the U.S.A. in the 1930's, these two volumes of Rose Etudes became popular for clarinet study as taught by his "second generation" pupil Daniel Bonade. Rose received the dedications of *Introduction et Rondo* Op. 72 by Charles Widor (1844-1937) in 1898, and *Fantaisie* by Augusta Holmès in 1900.

vibrato is, once again, a matter of individual taste for clarinetists. One of the great American teachers, Daniel Bonade, who studied this piece with Mimart in the Paris Conservatoire, did not play with any vibrato. Neither did Gaston Hamelin (1884-1951), the clarinetist who first recorded this piece in 1931.[113]

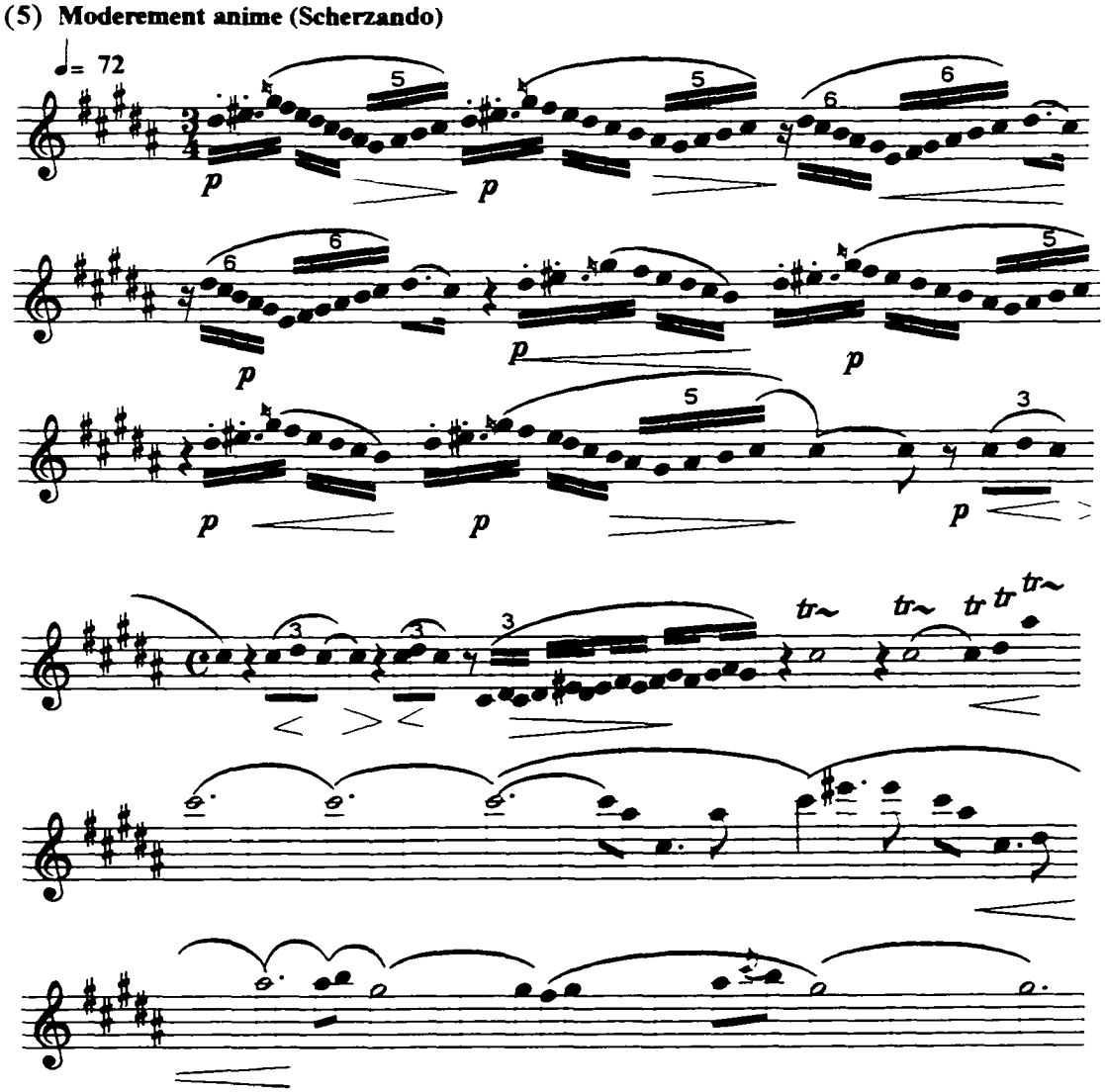
Nevertheless, some clarinetists will use vibrato to enhance the sound of this work. Since the piece is so lyrical and expressive, clarinetists might even try to vary the speed of their vibrato to make their performance more dramatic, more romantic, and more consistent with the French style of musical interpretation. Several of the notations written in this piece have inspired performers to interpret the music in different ways. Musicians often play faster or slower than the written tempo. For example, the tempo marked at (rehearsal number) #5 is seventy-two quarter-note per minute, but most clarinetists play it faster. Later #6 is marked *a tempo*, keeping the same tempo until two measures before #9. There are several questions that concern clarinetists in the section between #5 and #9. Is the *scherzando* tempo faster? Can players speed up and slow down in phrases? Can players add a tenuto to the eighth-note before #8? These questions have in fact been answered by each clarinetist in accordance with his or her personal interpretation. Alan Kay said in the interview:

You have to really study this piece carefully and play one or more phrases

[113]Gaston Hamelin's highly prized recording for HMV, DB 4809, of the orchestral version of the Debussy *Première rhapsodie* is now reissued in LP and CD.

exaggerated. My experiences with Impressionism this year have given me new interpretations of this piece. For example, after #5, the contrast between phrases is not only the loud and soft in volume, bright and dark in texture, but also fast and slow in tempo. I will play the second phrase slower than the first one [see Illustration 20].

Illustration 20, After #5, Debussy's *Première Rhapsodie.*



Mr. Gigliotti plays this piece in more of a straight style. He said in the interview:

> My teacher [Bonade] studied this piece [with Mimart] in Paris, and I feel very positive about the ideas he passed to me. In #6 the tempo keeps going through *Scherzando.* The *Scherzando* is, rather, a character without changing tempo. The tempo will not change until the 'Plus animé' is reached.

Mr. Gigliotti's comments indicate that the piece was not originally performed with a great amount of exaggeration. Nevertheless, both the clarinetists' personal views and the time period in which they lived influence their interpretation of music. Mimart played with vibrato, but his pupil Bonade did not. Bonade originally went to Paris from Geneva. Later he came to the United States and played in the Philadelphia Orchestra. Mr. Gigliotti recalled in the interview:

> When Bonade played in the Philadelphia Orchestra, Leopold Stokowski was the conductor. The precedent during that period for wind instruments was a bigger rounded tone. For example, the oboist Marcel Tabuteau changed the oboist's dark sound to the bigger rounded sounds in

Philadelphia.[114] That might explain why Bonade played with a straight rounded tone and never allowed his students to play with vibrato.

Musical interpretations certainly change all the time. Although Debussy's *Première rhapsodie* was dedicated to Mimart, this piece was later played throughout the world in many different styles. Today's clarinetists seem to play with more flexibility and exaggeration than their counterparts in the 1950s. Among the musicians I interviewed, Kay, Krakauer, Moses, and Neidich play this piece with a more flexible tempo and add vibrato to appropriate sections.

5. Would You Use Single- or Double-Tonguing at the End of the First Movement in Nielsen's Clarinet Concerto? And Would You Take a Breath in the Long Slow Phrase at the Beginning of Second Movement of this Piece, or Would You Play It with Circular Breathing?

The *Clarinet Concerto* by Nielsen was his last great orchestral work. It was written for Aage Oxenvad,[115] a clarinetist in the Copenhagen Wind Quintet.

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[114] Marcel Tabuteau, former principal oboist in Philadelphia Orchestra, was on the faculty of Curtis Institute of Music for thirty years. At the end of February 1954, Marcel Tabuteau left the Philadelphia Orchestra to return to France, where he lived in retirement until his death in January 1966 at the age of 78. During his years of teaching at the Curtis Institute of Music, he had a decisive influence on the standards of oboe playing in the United States, as well as raising the level of woodwind achievement. John deLancie and John Mack were two of his most distinguished students.

[115] Aage Oxenvad was born in Gettrup in Jutland, 1884. At age 12, he started playing clarinet. Later during his teen years, he studied with Carl Skjerne, the solo clarinetist with the Royal Chapel Orchestra, formerly a student of Richard Muhlfeld. Oxenvad joined the Royal Chapel Orchestra in 1909. He was the first to use the Boehm clarinet in that group, while his teacher and colleague, Skjerne, played a boxwood Oehler clarinet. Oxenvad became solo clarinetist in 1919 until his death 13 April 1944.

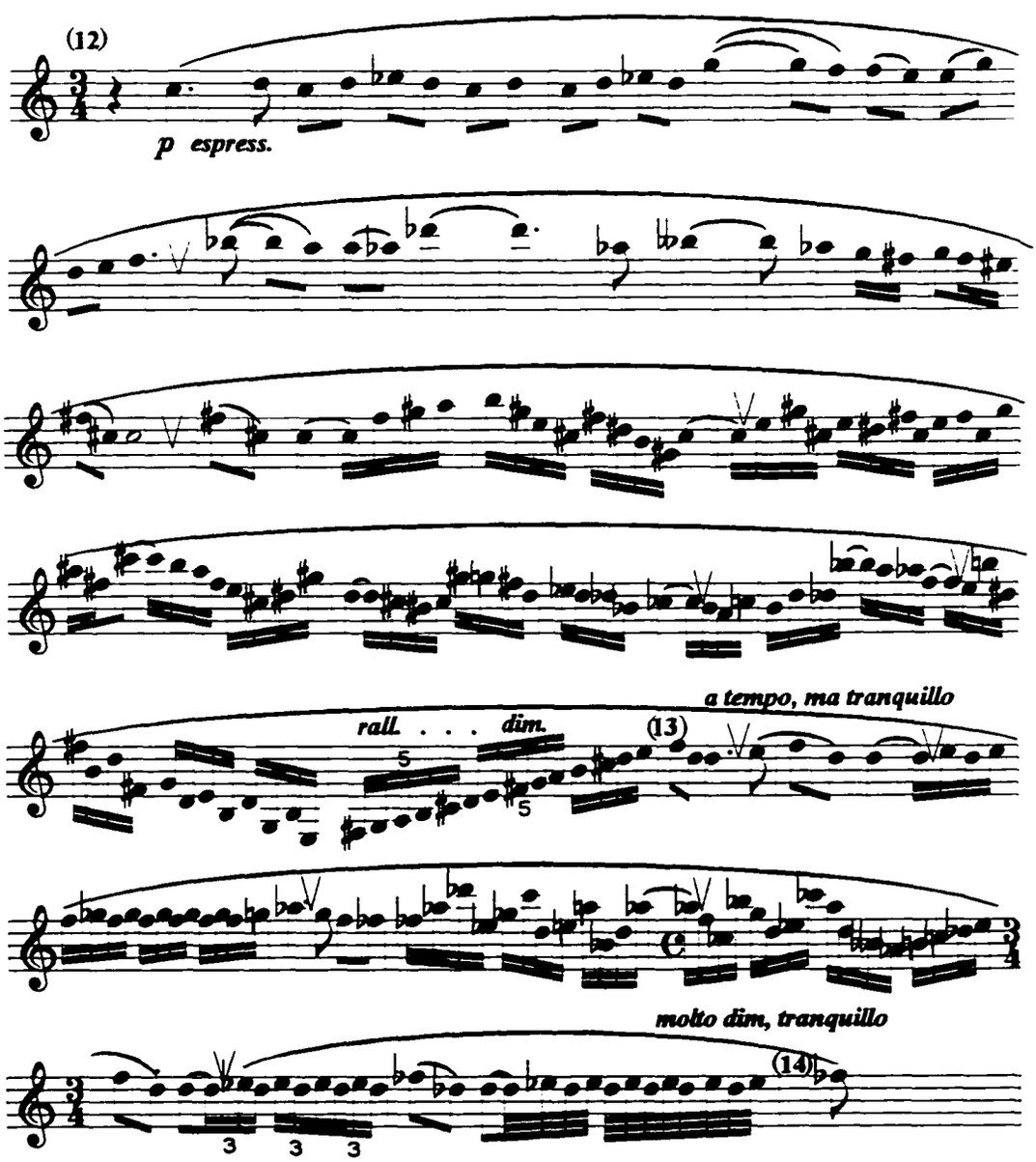
The biographer of Nielsen, Robert Simpson, described this concerto as a "knotty and often angry" work. Apparently, the nature of this work matched Oxenvad's personality. The first public performance of this concerto took place in Copenhagen on October 11, 1928, which Aage performing. After playing two performances of this concerto under Nielsen's baton on December 5, 1928 and April 7, 1929, Oxenvad made the following comment to exploit the technical difficulties about this piece: "[Nielsen] must be able to play the clarinet himself, otherwise he would hardly have been able to find the worst notes to play."[116]

In the Nielsen *Concerto*, it is optional for performers to use circular breathing during the slow section situated at the beginning of the second movement. Although there is a long slur all the way from #12 to #13, Nielsen did mark all the places for clarinetists to take a breath. Stanley Drucker had the following comment about this phrase: "If playing with circular breathing at this part, you have to play it till the end of the phrase [shown on the next page, Illustration 21, from the first measure of #12 to the first measure of #14]. This phrase has breath marks at certain places, and I would say these marks work well and there is no reason not to follow them." Stanley Drucker therefore does not use circular breathing in this section; neither does he choose to play with double-

[116]The first recording of this concerto was made by Louis Cahuzac in Denmark in 1947 for Columbia LDX 7000/2 with Copenhagen Opera Orchestra under the baton of Frandsen, which has been reissued under the title "Nielsen: The Historic Recordings" by Clarinet Classics, #CC0002. This recording also includes Cahuzac played *Serenata in Vano* and Oxenvad playing in the *Quintet for Wind Instruments*, all of them Nielsen's works. Among other performances is one by Niels Thomsen, the principal clarinetist of the Royal Orchestra in Copenhagen in 1979, issued by Chandos, #CHAN 8894.

tonguing.

Illustration 21. From the First Measure of #12 to the First Measure of #14, Nielsen Concerto.

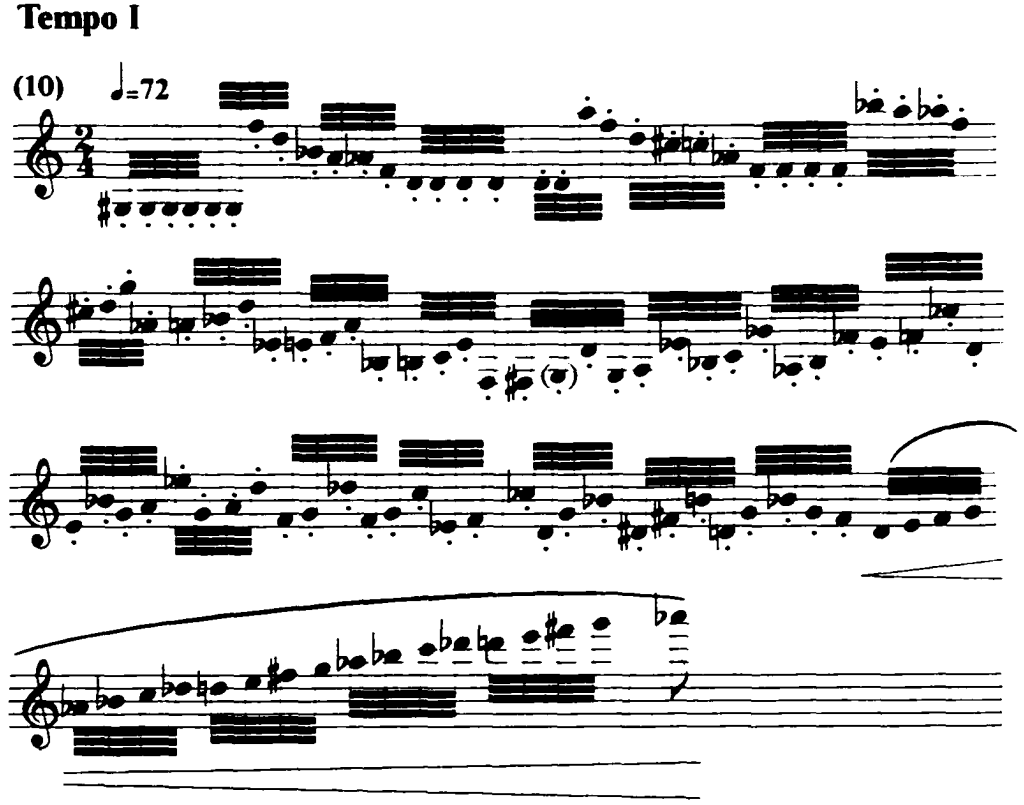


Charles Neidich offered another perspective on the Nielsen *Concerto*, saying that he would play the slow section at the beginning of the second movement with circular breathing. He reasoned in the interview:

> If we take a look at the style of Bach or other composers in the Baroque period, the phrases are much longer than the music from the Classical to the mid-Romantic periods. That makes it clear that a musical phrase in any era can be long, and should not be limited by the abilities of instruments or performers. If the composer demands a long phrasing, the player should try his best to play it.

As for the fast staccato part (shown on the next page, Illustration 22), musicians can choose to play this section with either single- or double-tonguing (please refer to Chapter IV for the way to play double-tonguing). It is important for clarinetists to play this part with a tempo that is as close to the actual tempo as possible. Clarinetists sometimes modify the tempo of these fast-detached notes to emphasize a lyrical phrase in a slower tempo, since not everyone can play consistent fast-detached notes throughout. If one can make this method work by using an agreeable phrasing, then there is no reason not to do it. However, most clarinetists today will play this passage as fast as possible in order to show off their technique and to follow the composer's notations. They might play single-tonguing, double-tonguing, or even single- plus double-tonguing to play this

Illustration 22. The fast staccato part, at #10, Nielsen Clarinet Concerto.



section in tempo. Some clarinetists will even add a note to replace the rest at the fourth measure after #10 to make it sound more complete. Both of the methods mentioned above work well. For example, clarinetists in the following two recordings have played consistent fast-detached notes in this section: Stanley

Drucker with New York Philharmonic and John Bruce Yeh[117] with the Chicago Chamber Orchestra. Clarinetists have played this section in a modified tempo in the following two recordings: Olle Schill with the Gothenburg Symphony Orchestra and Janet Hilton with the Scottish National Orchestra.

[117] A native of Los Angeles, John Bruce Yeh has been a member of the Chicago Symphony Orchestra since 1977. Mr. Yeh joined the orchestra at the age of 19 as Solo Bass Clarinetist and was appointed Assistant Principal/Solo Eb Clarinet two years later by Sir Georg Solti. A prizewinner at both the 1982 Munich International Music Competition and the 1985 Naumburg Clarinet Competition in New York, he performs as soloist with orchestras throughout America and Europe. As a member of Chicago Pro Musica, Mr. Yeh was honored with the Grammy in 1986 for "Best New Classical Artist" by the National Academy of Recording Arts and Sciences. The son of music-loving scientists, John pursued premedical studies at UCLA prior to entering the Juilliard School of Music in New York in 1975. His teachers include Joseph Allard, Harold Wright, Gordon Herritt, Gary Gray, Michele Zukovsky, Robert Marcellus, Ray Still, Mehli Mehta, and Marcel Moyse.

CONCLUSION: WHO IS CREATING HISTORY?

Who is a creator of history? And who is a follower of history? Musicians have often defined themselves as certain types of players, such as jazz players, popular music players, classical players,[118] or contemporary music player.[119] There are some pianists who focus on certain composers' music, such as works by Chopin, Brahms, or Beethoven; clarinetists, however, are not able to do this because the repertoire available to the clarinet is limited. However, clarinetists are fortunate because their instrument is more functional than other woodwind instruments, such as the oboe, flute, or bassoon. The clarinet can be used in big or small jazz bands as well as in the classical orchestra, because it has a colorful tone and a nearly four-octave range. It can also showcase all kinds of traditional and contemporary techniques, it is easy to carry, and it is not too expensive.

If a player remains static and refrains from experimenting with new techniques or interpretive styles in performances, this person may be said to be a follower of history. On the other hand, if a clarinetist constantly tries everything to improve the musicianship, then new directions may be created for history. Such fruitful experiments will help the clarinet become a more interesting instrument, and one or more of these discoveries may even engrave the player's name in history. For example, as mentioned before, the invention of thirteen-keyed clarinet by Müller in 1812 (please refer to the first section of Chapter V), was finally

[118] This term usually indicates a player whose focus is on the mainstream in music history, excluding jazz and all popular music.

[119] This title refers especially to the player who mainly performs music in post-tonal styles.

demonstrated to be better than other contemporary clarinets. It has become the model of today's German clarinet. Discoveries are made not only in the field of instrument construction, but also in the field of interpretations and techniques. For example, the performance styles of Richard Mühlfeld and Benny Goodman (I will detail this information in the following section) have had a profound influence on posterity. I conclude by outlining the clarinet's history from past to future, in the hope that people who are interested in the clarinet will have a broader view of its interpretation, techniques, and pedagogy.

Chapter VIII: Toward the Twenty-First Century

The clarinet is a relatively young instrument, compared to the strings and the flute. It had just passed its one-hundred-and-fiftieth birthday when the Boehm System mechanism was established. Clarinetists are still experimenting in every possible way to improve this instrument. They want to construct clarinets that are easier to play; furthermore, they want to build instruments that possess a more balanced sound in each register. Even though technological advances have resulted in the development of faster and softer response springs, along with other interesting components, clarinetists claim that they have yet to find a perfect instrument. In addition to their efforts to improve the instruments, clarinetists also want to experiment with new techniques and interpretative styles. In this chapter, I will point out some of the most likely ways to improve this instrument. I will also review the careers of a few successful clarinetists in the past. Finally, I will attempt to forecast the trend of clarinet performance in the future.

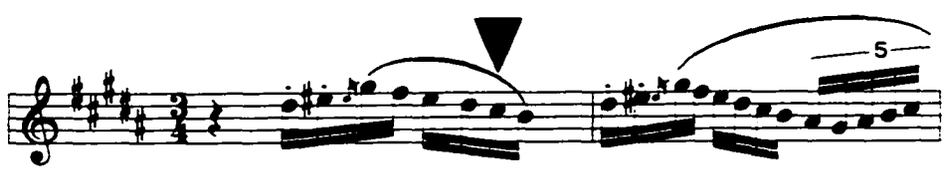
1. *The Instrument*

Clarinetists are always looking for a better instrument. They are not satisfied with perpetually playing the R-13 of Buffet or the 10-G of Selmer. All of the clarinetists I have interviewed claimed they have yet to find a perfect instrument with a beautiful tone color, faultless intonation, balanced mechanism, and a reliable hand position. Right now, all clarinet manufacturers need to make some improvement on their current models to fully satisfy their customers. First,

the hand position on the clarinet should become more "player-friendly." The need for this improvement is evidenced by the fact that many clarinetists have to change the thumb-rests on their instruments. Manufacturers should alter the key positions to suit the clarinetists' fingers instead of putting the keys all in a line. Some flute manufacturers have already done this for the flute.[120]

In addition to the problems mentioned above, clarinets can also use more rollers, like the saxophone. The current instrument does not work well when clarinetists must play from E-flat" to C', or the reverse, by using only the right hand little finger. It is also awkward to play from B' to C-sharp" with the left hand's little finger. For example, as shown below, Illustration 23, the passage in Debussy's *Premiere rhapsodie* could be more easily played if a roller were added. Although some models of the clarinet do contain an extra E-flat key at the left side, these current alternative keys are quite cumbersome to use, especially since their responses are not as quick as the keys on the right side.

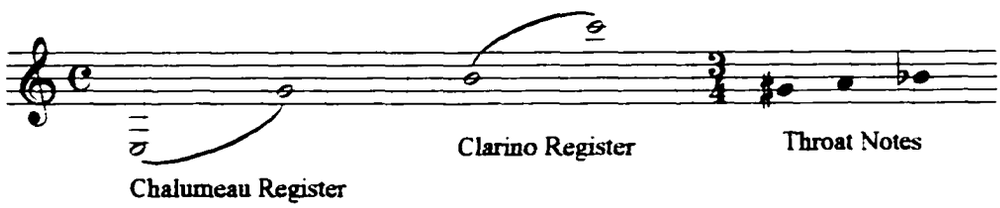
Illustration 23. Seven measures after No. 5, Debussy *Premiere rhapsodie*. A roller between C-sharp and B will help to make this phrase sound smoothly.



[120] Such as an "in-line" or "off-set" design for the "G cup" of the flute.

Right now, the placement of the register keys, the size of each key, and the size of the tone holes are somewhat experimental. The current placement and size of the register keys have provided good pitch for the overtone system. However, this arrangement has sacrificed the tone colors for the note [B-flat'], which sounds better when it is matched with a larger key. Similar problems plague other so-called "throat-tone" notes on the current instrument, including G-sharp' and A'. Their tone is not as well balanced as the other notes. This is especially true when they are played in the chalumeau or clarino register (shown below, Illustration 24).

Illustration 24. The registers of chalumeau, clarino, and the throat notes of the clarinet.



Yet another problem with the current clarinet is that it produces a less than optimal sound when one plays the B-flat'-B' trill that crosses two registers. Clarinetists have to adjust their air-column forward when this trill is applied. Although it is easier to play this trill using some models of clarinet that have the

low E-flat key, the improved system is still less than perfect. Clarinet makers should seriously examine this problem.

Finally, the current instruments have some mechanical problems. For example, the four side-keys on the upper joint used by the right index finger apparently rub against each other when used. Consequently, it is awkward to use them. The shape of the clarinet pad-cups needs to be improved to resemble those in the flute or the saxophone. An improved pad cup, using the same flat seat construction in the pad cup as in the flute or saxophone, will provide proper pad support and alignment. Also, the tension of the spring of the clarinet pillars does not satisfy all clarinetists. The problem is most evident in the lowest portion of this instrument, which produces more noise when players employ the fingerings of E, F-sharp, G, and G-sharp.

Once again, as mentioned in the third section of Chapter III, young clarinetists may suffer from the weight of the instrument and the awkward position of the thumb-rest. Manufacturers should supply young clarinetists with a lighter plastic clarinet. Such a clarinet should have an adjustable thumb-rest. It should also possess secure mechanisms, such as closed-over tone holes in the lower joints, and rubber pads, mechanisms that might be easier for young students to repair. Furthermore, mouthpiece makers should also create a rather open mouthpiece that allows students to produce the tone easily with a softer reed. By supplying this type of instrument, manufacturers will benefit from the increasing popularity of the clarinet. This type of instrument will not replace professional models of clarinet

since the two are very different.

2. *Outstanding Clarinetists of The Past*

What type of clarinetists will be remembered throughout history? In the past two hundred years, some clarinetists have played important roles in music history, besides being outstanding performers. Some of them are the leading teachers Klosé, Cyrille Rose, and Daniel Bonade, inventors Iwan Müller, Jean Xavier Lefèvre (1763-1829) and Auguste Buffet, or composer-related performers such as Mozart's Anton Stadler, Karl Stamitz's Josef Beer (1744-1812), Weber's Heinrich Baermann, Brahms's Richard Mühlfeld, and Benny Goodman. There is no doubt that each of these clarinetists has made a significant contribution by increasing the popularity and the repertoire of this instrument.

The clarinet style of the French school has gradually come to dominate the world in the twentieth century. Its success can be explained by two factors: first, it benefited from the influence of accomplished French teachers such as Frederic Berr, H. E. Klosé, C. Rose, P. Mimart, and Daniel Bonade. Second, it gained prominence when the Boehm-system clarinets became popular all over the world. The French clarinet is attractive because of its softer and easy-to-blow reed, relatively relaxed embouchure, and the smoother motion of fingers that it requires. These features suite the needs of current clarinetists who want to express in performance a style that is natural, relaxed, and that minimizes the fingers' motion. Manufacturers must judge the quality of their instruments by the preferences of

contemporary musicians. They should improve their instruments by adopting suggestions made by major clarinetists, or, alternatively, by adjusting the instruments to increase the numbers sold. A marketable instrument usually pleases musicians.

While making a good instrument is a matter of meeting the players' needs, there seems to be no standard method of becoming a memorable clarinetist. Anton Stadler, Richard Mühlfeld, and Benny Goodman were not the greatest performers of their time. Yet they made significant contributions to music history and made the clarinet a more popular instrument. What instrument did Stadler used to play Mozart's clarinet works? How did Mühlfeld, who did not receive traditional clarinet training, inspire Brahms to write the most beautiful clarinet music in the last period of the composer's life? How did Benny Goodman popularize both the clarinet and some twentieth-century clarinet repertoire written between 1935 and 1950, such as Copland's *Concerto*, Bartók's *Contrasts*, etc.? There are numerous answers to these questions. One common trait shared by the three musicians, however, is the fact that they possessed some special characteristics that distinguished them among their contemporaries. None of these three clarinetists was a "mainstream" clarinetist of his time. For Stadler, the works he commissioned from Mozart distinguished him from his peers. For Mühlfeld, his particular style of musical interpretation attracted Brahms and separated him from the other clarinetists of his time. For Benny Goodman, the style in which he played, namely big band jazz, made him appear different from other clarinetists and

impressed audiences all over the world.

These historical incidents raise some interesting question for all clarinetists. For example, why did Brahms choose such an unconventional clarinetist to present his works? Could a clarinetist play with a different style from that of his or her contemporaries and hope to be as successful as Benny Goodman? Are there similarities between classical and non-classical (such as popular) music? Can classical and popular music be, at times, combined?

There are many years between the times that these three musicians made history, which were, respectively, at 1791, 1891, and around 1941. One cannot help but ask: Who will be the next person to create history? What type of characteristics will this musician have?

3. *The Clarinetist in The Future*

As I have mentioned above, the most important feature of an outstanding musician lies in the ability both to enjoy and to invent the musical environment in which he or she resides. In other words, the player must simultaneously fit into the current surroundings and develop a personal style. Many of the clarinetists I interviewed suggested that, at first, a great clarinetist should be able to play pieces from all periods of music history well. For example, some of the pieces written in the twentieth century require novel techniques such as glissandi, multiphonics, etc. Consequently, clarinetists must master new as well as traditional techniques and interpretive styles to keep abreast of the demands of past and present composers.

They should possess this mastery regardless of whether they eventually decide to perform every piece that they have mastered. Clarinetists cannot allow themselves to play only the Weber concertos year after year. In fact, a great clarinetist will jump at the chance to play new music. Such opportunities are vital both to the personal progress of the performer and to the growth of the musical environment. Clarinetists have to look for—and even try to create—opportunities to do novel or less-performed works. In the past, players prepared their excerpts for auditions to seek employment. Currently, the situation is not as simple as it was in the past. Clarinetists now often need to play in different venues. Clarinetists should be able to play in a chamber ensemble or an orchestra, or to perform as soloists. They should also be able to play contemporary music as well as the music of the future. At the same time, preferably they should have a taste for both jazz and classical styles of performance. A clarinetist must appreciate what he or she has studied and harbor a flexible attitude towards the things that he or she is going to study. Players must work to make their musicianship grow after they have finished their conservatory training and have a foundation in classical or commercial music. They should always try to develop their own performance styles.

Second, a successful musician should also be able to take advantage of changing technology. For example, the emergence of computer technology in the last twenty years has changed the way most people live and do research. It has also altered and broadened the music industry. Now, some clarinetists such as

David Campbell[121] from Britain are trying to expand their teaching, using the CD-ROM. One can even surmise that live concerts will finally take place through the Internet. If this occurs, it will certainly allow musicians to reach more audiences. These rapid developments suggest that if clarinetists refrain from using new technology, they will gradually become lost. Future clarinetists will be influenced by electronic inventions such as smaller tuners and metronomes. Our children will probably make improvements upon current instruments and instrument parts that will lead to the use of novel interpretative styles and techniques. Composers will likely adopt these new techniques in their works, both to widen the scope of their composition and to satisfy the diverse interests of the music industry. Consequently, clarinetists must be willing to adapt to changing technology.

Third, clarinetists should also be flexible and innovative as they develop their careers. Today, one must compete against a very qualified group of musicians in order to obtain a seat in the traditional orchestra. Nevertheless, the music industry seems to be filled with more opportunities than before, opportunities that clarinetists should seize. There are many other career paths that musicians can adopt other than playing in an orchestra. Among the clarinetists I have interviewed, only Anthony Gigliotti, Bernard Portnoy, and Stanley Drucker have played as an orchestral member for most of their lives. Other clarinetists have

[121]David Campbell studies with British clarinetist Thea King. Campbell served as department head of woodwinds at the London College for the last ten years. Twenty-two years ago, the London *Times*, reviewing his concert debut at Wigmore Hall, said he " bids fair to add his name to the lengthening list of significant English clarinet players. His confidence and technique are boundless." He is currently developing a CD-ROM which he expects to be published in Fall 1998, in which he offers education for clarinet students, including both beginners and advanced students.

varied careers: Charles Neidich performs all over the world as a soloist. Richard Stoltzman records and performs both classical and popular music. David Krakauer succeeds in popularizing Klezmer music by combining it with twentieth-century techniques such as glissandi and vibrato. John Moses makes his career playing as a "doubler" in Broadway shows and commercials. He also performs as an orchestral player. Alan Kay plays free-lance, teaches, and conducts the Youth Chamber Society. Kalmen Opperman teaches and acts as an inventor, repairman, and tool-maker for clarinet players. There are many chances for clarinetists who have the desire to play the instrument as a career. As long as they have courage and perseverance, they will finally find their position in the world.

Fourth, while they are performing, clarinetists should have the ability to have fun! People who cannot have fun will never be great musicians; they may be good, but never great. A performer has to reach as many people as possible, anytime and everywhere. Since this is the case, clarinetists should not insist on playing only on the stages of concert halls. Since music-lovers do not exist exclusively in concert halls, clarinetists should strive to perform for all those who appreciate music. Audiences can be reached in schools, hospitals, libraries, parks, subways, or even on the street.

Fifth, clarinetists should be prepared to teach. Furthermore, they should teach students in as broad a manner as possible. They should be ready not only to instruct in classical music but also to teach music that interests young players. For example, young students might be more attracted to playing popular music in a

group situation than classical music in a private exercise. Teachers should not limit their students to learning exclusively in a certain type of setting. Teachers should also strive to play more than one instrument, since students might demand to know more. While inertia often prevents people from learning another instrument, they should keep in mind that their goal is to become musicians instead of merely clarinetists.

Finally, the spirit of clarinet performance has never changed: clarinetists should imitate singers. It does not matter whether the clarinetist is practicing basic training such as breathing, tonguing, or moving fingers, or playing modern techniques such as glissandi, multiphonics, or flutter-tonguing, he or she must always try to sing with the instrument. The clarinet can be likened to a microphone connected to the player's mouth that amplifies the musician's response to the music. Clarinetists should try to "sing" on their instruments rather than just playing them. In other words, playing clarinet is an emotional expression; it is most successful when the clarinetist can involve the audience in the performance. A clarinetist should also have a broad view of music and not merely focus on details. If a person concentrates exclusively on one tree, he or she will lose the whole beauty of the entire forest.

All clarinetists I have interviewed have the same philosophy: attend as many concerts as possible. Place less emphasis on choosing the best reed, mouthpiece, and instrument; rather, work more on musicianship. Try to be the best musician one can be by placing one's priority on the music; meanwhile, work

constantly to improve one's technique. Always remember, there is nothing above musical understanding—the truth conveyed by this statement never changes.

Appendix

The Questions Put To All the Clarinetists In Their Interviews.

My questions presented to each clarinetist were as follows:

1. Do you think there are any physical or psychological requirements for becoming a clarinetist? If yes, please indicate what they are?
2. Please indicate the way(s) to practice the following techniques:

   fast-legato(such as the last section in Weber's Clarinet Concertino),

   single-tonguing, double-tonguing, playing large-intervals smoothly.

   How fast do you think a professional clarinetist should able to play staccato?
3. Please indicate the correct position for the following practices:

   breathing, hand-position, arm-position, embouchure, tongue-position.)
4. What is a good age to start clarinet lessons? Why? and how do you define a talented student?
5. Has there been any change of interpretation of the following pieces, in your mind, since you first learned them:

   Mozart's Clarinet Concerto and Quintet (Would you play with an extended clarinet?),

   C.M. von Weber's Clarinet Concertos and Quintet (Would you play a cadenza at the end?),

   Brahms Clarinet Sonatas, Trio, and Quintet (Would you use vibrato in the slow movement?),

   Debussy's *Premiere rhapsodie* (Would you use vibrato in the slow parts, or

exaggerate the dynamics and tempo changes?)

Nielsen Clarinet Concerto. (Would you use single- or double-tonguing at the end of the first movement? And would you take a breath in the long slow phrase at the beginning of second movement? Or play it with circular breathing?)

6. Do you use the following Twentieth-Century clarinet techniques: glissandi, multiphonics, vibrato, and circular breathing. How do you practice them? Please give examples. Do you apply any of them to music composed before the year 1900? Please describe and give examples.
7. Please indicate the brand (type) you use of the following materials, and explain the reason(s):

   clarinet (instrument), mouthpiece, ligature, reed, and barrel.

   Do you use the above materials consistently in all music? or would you change some of them depending on the music? If yes, please indicate.
8. Please list the important clarinet repertoire in each music period of music.
9. What are your standards to judge a clarinetist in an audition or competition?
10. What are the characteristics a great clarinetist should have in the future?

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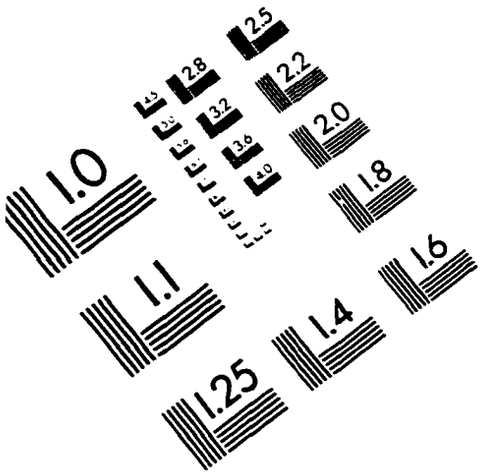

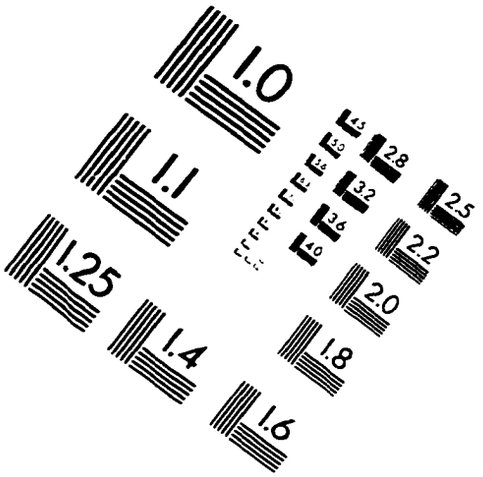

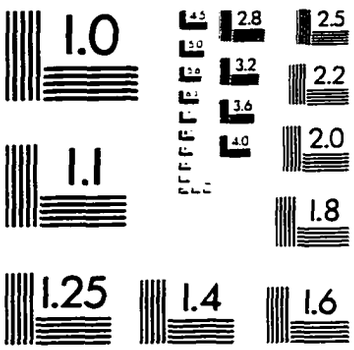

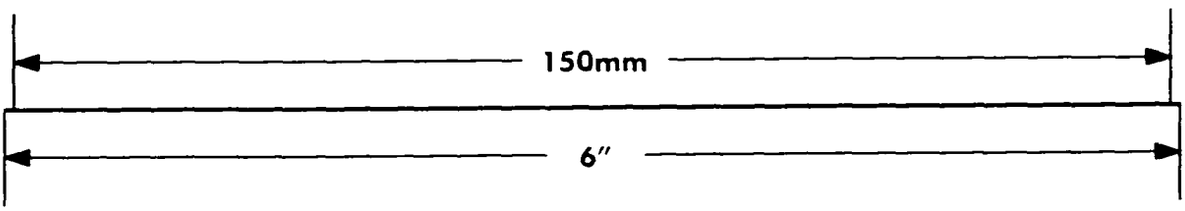

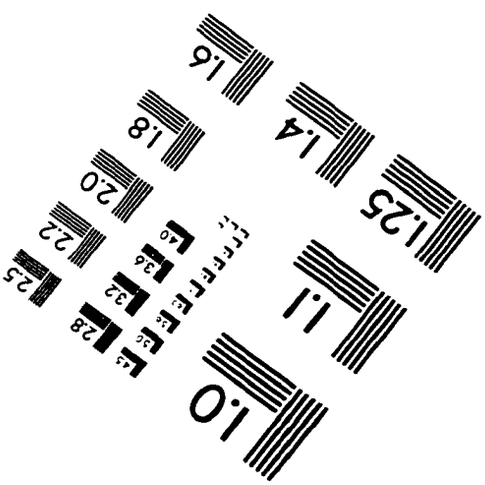

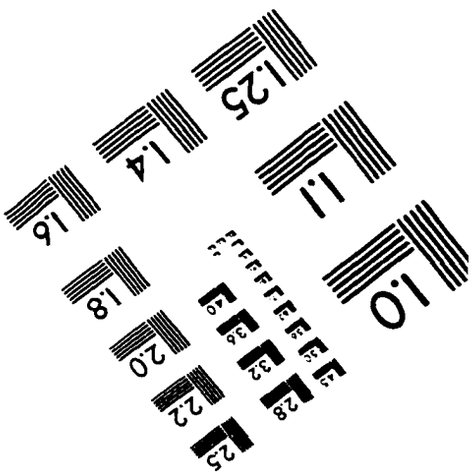

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