THE HISTORY AND DEVELOPMENT OF VIBRATO AMONG CLASSICAL SAXOPHONISTS, A LECTURE RECITAL TOGETHER WITH THREE RECITALS OF SELECTED WORKS OF A. DESENCLOS, L. ROBERT, J. IBERT, K. HUSA, B. HEIDEN, R. SCHUMANN AND OTHERS

DISSERTATION

Presented to the Graduate Council of the
North Texas State University in Partial
Fulfillment of the Requirements

For the Degree of

DOCTOR OF MUSICAL ARTS

By

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Denton, Texas
December, 1986

Lamar, Jacquelyn B., The History and Development of Vibrato Among Classical Saxophonists, a Lecture Recital Together With Three Recitals of Selected Works of A. Desenclos, L. Robert, J. Ibert, K. Husa, B. Heiden, R. Schumann and Others. Doctor of Musical Arts (Saxophone Performance), December, 1986, 41pp., 2 figures, 10 recorded examples, 7 performed examples, bibliography, 45 titles.

This study examines the history and development of vibrato among classical saxophonists as well as briefly summarizes the history of vibrato in general from its origins on string instruments, the voice and other wind instruments. An analysis of recordings of early saxophonists shows the approximate time period of incorporation of vibrato on the saxophone and the influences of performers and musical styles on its development.

Pedagogical methods of performing vibrato on the saxophone are included as well as a discussion of saxophone vibrato styles. An exploration of vibrato as an expressive musical device is provided along with conclusions drawn concerning performance practice implications.

Tape recordings of all performances submitted as dissertation requirements are on deposit in the North Texas State University Library.

CONTENTS

NORTH TEXAS STATE UNIVERSITY
SCHOOL OF MUSIC

Graduate Recital

Jackie Lamar, Saxophone

assisted by

Judy Fisher, Piano
Diane Wernick, Alto Saxophone
Brian Todd, Tenor Saxophone
Perry Rask, Baritone Saxophone

Monday, April 13, 1981 8:15 p.m. Concert Hall

Program

Violincello Suite III — J.S. Bach
arr. Ramon Ricker
- Prelude
- Allemande
- Courante
- Sarabande
- Bourree I
- Bourree II
- Gigue

Three Romances — Robert Schumann
arr. Fred Hemke
- Not fast
- Simple, heartfelt
- Not fast

Intermission

Prelude, Cadence et Finale — A. Desenclos

Grave et Presto — Jean Rivier
pour Quatour de Saxophones

This program is presented in partial fulfillment of the degree of Doctorate of Musical Arts

North Texas State University
School of Music

Graduate Recital

JACKIE LAMAR, Saxophone

Assisted by:
Mark Graham, Piano
Tom Myer, Alto Saxophone
David Fivecoate, Tenor Saxophone
Frank Bongiorno, Baritone Saxophone

Friday, June 11, 1982 5:00 p.m. Recital Hall

Sonata. . . . . Bernard Heiden
I Allegro
II Vivace
III Adagio--Presto

Saxophon Concerto. . . . . Erland von Koch
I Allegro moderato
II Andante sostenuto
III Allegro vivace

Intermission

Quatuor pour Saxophones . . . . . Alfred Desenclos
I Allegro non troppo
II Calmo
III Poco largo, ma risoluto--Allegro energico

Fantasia. . . . . Heitor Villa-Lobos
I Animé
II Lent
III Très animé

Presented in partial fulfillment of the
requirements for the degree of
Doctor of Musical Arts

North Texas State University
School of Music

Graduate Recital

Jackie Lamar, Saxophone

Assisted by

Judy Fischer, Piano
Carroll Thompson, Harpsichord
Tom Beers, Bassoon

Monday, November 4, 1985 6:30 p.m. Concert Hall

Sonata, Op. IV, No. 12 . . . . . Jean Baptiste Loeillet
Largo
Allegro grazioso
Adagio
Allegro

Cadenza . . . . . Lucie Robert

Intermission

Concertino da Camera . . . . . Jacques Ibert
Allegro con moto
Larghetto; Animato molto

Elegie et Rondeau . . . . . Karel Husa
Quasi improvisando
Allegretto

Presented in partial fulfillment of the
requirements for the degree of
Doctor of Musical Arts

North Texas State University
School of Music

presents

JACKIE LAMAR

in a

GRADUATE SAXOPHONE LECTURE-RECITAL

"The History and Development of Vibrato
Among Classical Saxophonists"

assisted by

JUDY FISHER

Monday, July 21, 1986 Recital Hall 5:00 p.m.

Cheerfulness . . . . . Ben Vereecken

Valse Erica . . . . . Rudy Wiedoeft

Sonata, Opus 19 . . . . . Paul Creston
With Tranquility

Improvisation I . . . . . Ryo Noda

This recital is presented in partial fulfillment
of the requirements for the degree of
Doctor of Musical Arts.

TABLE OF FIGURES

TABLE OF RECORDED EXAMPLES

TABLE OF PERFORMED EXAMPLES

CHAPTER I

HISTORY OF VIBRATO

It is difficult to imagine the saxophone without vibrato, but classical saxophonists prior to the twentieth century thought vibrato inappropriate. Today, vibrato is considered an essential part of tone quality and expressiveness on most wind instruments. Prior to the twentieth century this was not the case, however. Vibrato was used mostly as an ornamental device rather than as a constant tone coloration. Some factors involved in this style change include the influence of popular music and jazz, which introduced vibrato to many wind instruments, and the influence of increased vibrato use by famous string and wind performers at the turn of the century.[1] An analysis of recordings of early saxophonists will show the approximate time period of incorporation of vibrato on the saxophone, hopefully filling a gap in saxophone vibrato research that has heretofore been lacking.

The first actual references to the vibrato appear in an early Greek treatise on playing the kithara. It describes a manner of tone production in which the plectrum is moved

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1. Joseph Berljawsky, "The Evolution of Vibrato," The Strad LXXVIII/931 (Nov. 1967), 261.

back and forth over the strings, producing an effect similar to vibrato.[2] Latin authors of the later Middle Ages used the expression reverberatio to mean "vibrating."[3]

The developing critical awareness of the Renaissance and the appearance of musical treatises from this time led to the emergence of pedagogical opinions concerning the production of vibrato.[4] Martin Agricola (1486-1556) alluded to vibrato in the following poem from Musica Instrumentalis Deutsch:

> And if you wish a firm foundation
> So learn to play with trembling breath,
> For it is to singing most becoming,
> And to piping most flattering.[5]

Sylvestro Ganassi discussed the technical production of vibrato in his viola method of 1542, suggesting its use as a suitable effect for "solemn and sad music", calling for a vibrato produced not only with the left hand, but also with the bow arm.[6]

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2. Robert Haas, Aufführungspraxis der Musik (Potsdam, 1934), 25, cited in Jochen Gärtner, The Vibrato: With Particular Consideration Given to the Situation of the Flutist, trans. Einar W. Anderson (Regensburg: Gustav Bosse Verlag, 1981), 16.

3. Carl E. Seashore, "Psychology of the Vibrato in Voice and Instrument," Iowa Studies in the Psychology of Music (1936), III, 8, cited in Gärtner, op. cit., 16.

4. Gärtner, op. cit., 16.

5. Martin Agricola, Musica Instrumentalis Deutsch (Wittenberg: Rhaw, 1529), in Aelterer Practischer und Theoretischer Musikwerke (New York: Broude Brothers, 1966), XX, cited in Gärtner, op. cit., 17.

Marin Mersenne's Harmonie Universelle of 1636 recommended a sparingly-used and well-performed vibrato. He discussed various production methods as they applied to the different instruments; a one-finger vibrato for plucked strings and a two-finger vibrato for bowed strings. Mersenne also introduced a specific symbol for vibrato, 7 , to indicate appropriate locations for its use.[7]

The increase of soloistic playing in the Baroque period led to the desire among performers for further virtuosic development. This in turn brought about an increase in the number of musical treatises concerned with discussing technical performance problems. The flute method of Jacques Hotteterre from 1707 contains an entire chapter on vibrato, but describes only a finger vibrato, not a breath vibrato, giving fingerings for its production. He formulates exact rules for its placement, stating that the vibrato was an ornamentation, not suitable for every piece. He felt that flattements or vibrato should be used only on long notes.

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6. Silvestro Ganassi, Regola Rubertina (Venice 1542), new ed. (Bologna: Forni Editore, 1970), 6, cited in Gärtner, op. cit., 19-20.

7. Marin Mersenne, Harmonie Universelle (Paris, 1636), new ed. (Paris: Editions du Centre National de la Recherche Scientifique, 1963), III, 81-83, cited in Gärtner, op. cit., 19-20.

In addition, it would be difficult to teach the student to recognize all the places where these ornaments ought to be used, and that taste and practice should contribute more than theories to its correct usage.[8]

Geminiani discussed vibrato as the "closed shake" or "tremolo" in his Art of Playing on the Violin of 1751. His description stated that vibrato could not be indicated by written notes as with the other ornaments described in his treatise. His instructions for performing the "closed shake" or vibrato were as follows: "To perform it you must press the finger strongly on the string and move the wrist in and out, slowly and equally."[9] This shows that Geminiani was discussing a true vibrato but considered it a purely ornamental device.

Flute vibrato produced by breath impulse is indirectly referred to by Johann Joachim Quantz in his 1752 treatise, On Playing the Flute. "One can improve the tone of the flute greatly by the movement of the chest. This motion must occur, however, not with forcefulness, namely shivering, but rather with calmness."[10] Because Quantz warns against

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8. Jacque-Martin Hotteterre, Principles of the Flute, Recorder and Oboe (1707), trans. Paul Marshall Douglass (New York: Dover Publications, Inc., 1968), 45-47.

9. Francesco Geminiani, The Art of Playing on the Violin (1751), ed. and trans. David D. Boyden (New York: Oxford University Press, 1952), 8.

"shivering", this may indicate that he preferred a steadier tone quality. Quantz also discusses the flattement or bebung mentioned by Hotteterre, to be produced with the finger on the next nearest open hole and only for long notes of a half measure or more.[11]

Robert Bremner gives indications of vibrato performance practice during the eighteenth century in "Some Thoughts on the Performance of Concert Music" of 1777.[12] The use of vibrato was permissable only on long notes of simple melodies and was not recommended when playing harmony because it disrupted the tuning. The constant, straight tone was the ideal sound at the time of Leopold Mozart; only exceptionally was it enlivened by the use of vibrato on significant occasions. Mozart's objection to the constant use of vibrato stemmed from the fact that it did not sound purely on one pitch. He believed that performers should only use tremolo where nature itself would use it, on a final or other long held note.[13]

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10. Johann Joachim Quantz, On Playing the Flute (1752), trans. Edward R. Reilly (London: Faber and Faber, 1966), 59.

11. Ibid., 165.

12. Robert Bremner, "Some Thoughts on the Performance of Concert Music," Jan. 1777, reprinted in Neal Zaslaw, "The Compleat Orchestral Musician," Early Music VII/1 (June 1979), 46.

13. Leopold Mozart, A Treatise on the Fundamental Principles of Violin Playing (1755), 2nd ed., trans. Editha Knocker (New York: Oxford University Press, 1951), 238.

In the Italian Bel Canto school of singing, nothing was more admired and cultivated than an absolutely steady tone.[14] Other methods of musical expression were substituted for vibrato, including messa di voce and portamento.[15] Messa di voce involves swelling and diminishing the tone on a long held note. The portamento is performed by making a gradual glissando from one note to another. Both are important devices of musical expression.

By the nineteenth century, vibrato began to be used more frequently on string instruments, as is shown in Louis Spohr's Violinschule of 1832.[16] Spohr further developed the vibrato into a more expressive element giving specific instructions on how and where to use it. Examples of notated vibrato in his method show students appropriate places for the technique. Spohr divides vibrato into four types (Figure 1):

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14. Herman Klein, The Bel Canto: With Particular Reference to the Singing of Mozart (London: Oxford University Press, 1923), 25.

15. Ibid., 29, 31.

16. Louis Spohr, Violinschule (Vienna: Haslinger, 1832), 175, cited in Gärtner, op. cit., 30-32.

Figure 1. Types of Vibrato, Louis Spohr

a. The fast type on strongly accented notes

b. The slower type, on solemn notes, in impassioned lyrical passages

c. The accelerating type, on notes with crescendo

d. The decelerating type, on notes with diminuendo.

He also warned against using vibrato too often or in the wrong place, still considering vibrato principally as an expressive ornament to be used just for dramatic high points.

Among vocalists, a more constant vibrato began to be used in the Paris Opera around the middle of the nineteenth century. Vibrato became a powerful tool for expressing the passionate feelings inherent in Romantic music.[17]

String performers and vocalists were using vibrato much more extensively than wind players at the beginning of the twentieth century. At this time, composers used wind instruments mostly for background parts so there was little need for an expressive vibrato. This is exhibited in a pre-1914 recording of Adolphe Adam's Bravoura Variations for voice and flute. The soprano, Frieda Hempel, uses some vibrato while the flutist, Endrik de Vries, uses no vibrato.

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17. Klein, op. cit., 25

Recorded Example 1. Adolphe Adam, Bravoura Variations, performed by Frieda Hempel, Soprano; Endrik de Vries, Flute, prior to 1914 (Deutsches Musikarchiv DG/ 76020).

The change from a purely ornamental vibrato to a more constant, tone-color vibrato occurred in the early twentieth century. At the turn of the century, there grew a split in the schools of thought concerning vibrato. Violinist Joseph Joachim (1831-1907) still regarded vibrato as a special ornament for expressive purposes, but extended the technique to include emphasizing some notes in faster passage work.[18] Among the next generation of violinists, Fritz Kreisler (1875-1962) used a continuous vibrato, extending its use even to fast passage work.[19]

Around the beginning of this century, the fraternity of flutists was divided into two mutually hostile camps. On one side (northern European countries such as England, Germany and Scandinavia), opinion preferred a straight, large-volume flute tone, which would be enlivened with vibrato only at musically meaningful places. Too much vibrato was considered to be in poor musical taste. On the other side, the use of vibrato by wind players in the Romance countries, especially France at this same time, was so widespread that no one questioned its use. Here it

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18. Gärtner, op. cit., 36-37

19. Werner Hauck, Vibrato on the Violin, trans. Kitty Rokos (London: Bosworth and Co., Ltd., 1975), 20-21.

was not so much considered a decoration as a natural component of the tone.[20]

The French flutist, Marcel Moyse, in a series of articles on vibrato, told of a time from 1926 to 1939 when France was frequently visited by German and Austrian orchestras. He noted a big difference in expressiveness between the strings and the winds because the wind players did not use vibrato.[21] The difference between German, Italian and French flutists of the early 1930's can easily be distinguished in the following recorded examples of the "Affettuoso" from J. S. Bach's Brandenburg Concerto No. 5. With the German example, there is virtually no wavering of the tone, while in the Italian example, a slight vibrato is audible, though not as a continuous aspect of the tone quality. The French example, however, exhibits a much fuller and continuous vibrato that matches the vibrato of the violinist.

Recorded Example 2. J. S. Bach, "Affettuoso" from Brandenburg Concerto No. 5, performed by K. Thomas, Flute; S. Borries, Violin; Philharmonic Orchestra of Berlin, Alois Melichar, Harpsichord and Conductor (Bavarian State Library, DG: 15075 A/B, Matrix No. 464 1/2 GS 8-465 1/2 GS 8, 1934 (Germany).

Recorded Example 3. J. S. Bach, "Affettuoso:, performed by Arrigo Tassinari, Flute; Gioconda di Vito, Violin; Carlo Zecchi, Piano (Deutsches Musikarchiv, EMI-Electrola; 0-7885, Matrix No. 2-70121, 1933-40 (Italy).

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20. Gärtner, op. cit., 39.

21. Marcel Moyse, "The Unsolvable Problem: Considerations on Flute Vibrato," trans. Clara Frieman, Woodwind Magazine II/7 (March 1950), 4, 14.

Recorded Example 4. J. S. Bach, "Affettuoso", performed by Marcel Moyse, Flute; Adolf Busch, Violin; Rudolf Serkin, Piano (Bavarian State Library, Columbia: COLC 14/B, 1935 (France).

Paul Taffanel, one of Marcel Moyse's teachers, expressed dismay at having to use only the customary light, imperceptible vibrato. Moyse wrote concerning this time: "Vibrato was worse than cholera; young partisans were referred to as criminals. How often have I heard opinions exchanged at the pub or in the orchestra pits:

> Do you know so and so?
> Yes.
> Does he play well? What do you think of him?
> No, he vibrates."[22]

Moyse, however, wanted to follow the example of the great violinists and singers he had studied with and searched for an acceptable vibrato on flute for which he would not be ostracized.[23] He had discovered how vibrato could enhance the flute tone during his first recording experiences and

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22. Marcel Moyse, How I Stayed in Shape, trans. Paul N. Douglas (West Brattleboro, Vermont, n.d.), 5, cited in Fred L. Hemke, The Early History of the Saxophone, DMA dissertation, University of Wisconsin, 1975 (Ann Arbor, Michigan: University Microfilms, 1975), 275.

23. Moyse, "The Unsolvable Problem," II/9, 9.

preferred the life that vibrato could add to the sound.[24] Thus, the twentieth century began as a transitional period for the use of vibrato on wind instruments, with the technique eventually becoming a more constant tone coloration as well as an expressive device.

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24. Jack Hiemenz, "Marcel Moyse, Master Flutist: 'I Imitate Caruso'," High Fidelity/Musical America XXV/1 (Jan. 1975), 14.

CHAPTER II

SAXOPHONE VIBRATO

Prior to the twentieth century, saxophonists did not use vibrato in their playing as is indicated in early saxophone methods. The first saxophone method, Georges Kastner's Méthode Complète et Raisonnée de Saxophone of 1845, does not mention vibrato.[1] However, in a discussion of how to produce dynamic changes of crescendo and diminuendo, he states that volume changes should be made in a gradual manner with no fluctuation of the tone.

Early twentieth-century saxophone methods mention vibrato, but discourage its use. The Paul de Ville Universal Method for Saxophone of 1908,[2] and the Ben Vereecken Foundation to Saxophone Playing of 1917,[3] make identical statements concerning vibrato: "Avoid the tremolo or vibrato style of playing. See that your tone is absolutely clear and pure."

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1. George Kastner, Méthode Complète et Raisonnée de Saxophone (Paris: E. Troupenas et Cie., 1845), cited in Kenneth Norwood Deans, A Comprehensive Performance Project in Saxophone Literature with an Essay Consisting of Translated Source Readings in the Life and Work of Adolphe Sax, DMA thesis, University of Iowa, 1980 (Ann Arbor, Michigan: University Microfilms International, 1980), 135.

2. Paul de Ville, Universal Method for the Saxophone (New York: Carl Fischer, 1908), 12.

3. Ben Vereecken, Foundation to Saxophone Playing (New York: Carl Fischer, 1917), 8.

E. Franko Goldman devoted a chapter to the saxophone in his 1934 book, Band Betterment.[4] He warned that the tremolo tone acquired by most saxophonists could not be tolerated in a fine band. He felt that the problem stemmed from players trying to imitate "laughing jackasses, . . . neighing horses, and mooing cows." Under general pointers for all bandsmen, he encouraged a steady and pure tone without tremolo.[5]

Some early twentieth-century saxophonists who performed during the transitional period of adding vibrato continued to adhere to the style of the past, playing without vibrato. Jean Moremans, saxophone soloist in the John Philip Sousa Band in 1885,[6] recorded solos in 1905 with a straight, steady tone.[7] Eugene Coffin, who had played at President McKinley's inauguration of 1896, also recorded in 1905 without vibrato.[8] Marcel Mule recalled that before 1923, his predecessor in the French Guarde Republicaine Band, François Combelle, played without vibrato.[9]

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4. Edwin Franko Goldman, Band Betterment (New York: Carl Fischer, 1934), 112.

5. Ibid., 142. 6. Hemke, Early History of Saxophone, 418.

7. The Gypsy's Serenade, performed by Jean Moeremans (Victor 16272 B, c. 1904-5). Carnival of Venice, performed by Jean Moeremans (Victor 16244 A, c. 1904-5). The author wishes to thank Cecil Leeson for his generosity in making both himself and his multitude of rare recordings available for this study.

8. Sea Flower Polka, performed by Eugene Coffin (test pressing, c. 1905, Cecil Leeson Archives, Muncie, Indiana).

9. Hemke, op. cit., 275.

Cheerfulness, by Ben Vereecken, is a work from this time period which will be used to demonstrate the sound of saxophonists who performed without vibrato. It will be performed on a period Holton mouthpiece made of wood and lined with metal.

Performed Example 1. Ben Vereecken, Cheerfulness (Oskaloosa, Iowa: C. L. Barnhouse, 1908).

As vibrato began to be employed on the saxophone, various methods of production were explored. The first of these was a breath impulse vibrato like that used on the flute. H. Benne Henton, saxophonist with Sousa in 1905, recorded in 1899 without vibrato.[10] However, in a 1916 recording of his solo Laverne, he was using a slight impulse vibrato on most long notes.[11] Tom Brown, lead player with the Six Brown Brothers Saxophone Sextet, used a very fast impulse vibrato in a 1916 recording, while the others, playing accompanying parts, used none.[12] Some saxophonists developed the very annoying "nanny-goat" throat

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10. Todd Granzow, "Rudy Wiedoeft: The Dawn of Saxophone Performance," The Instrumentalist XXX/5 (Dec. 1981), 48.

11. H. Benne Henton, Laverne, performed by H. Benne Henton with the Patrick Conway Band (Victor 18149 B, 1916-17).

12. That Moaning Saxophone Rag, performed by The Six Brown Brothers, 1916017 (Cecil Leeson Archives, Muncie, Indiana).

vibrato in the 1920's. These included both classical and popular saxophonists such as Clyde Doerr[13] and Paul Biese.[14]

A second method of vibrato production that enjoyed brief popularity was that of loosening the embouchure and shaking the instrument. Gustav Bumke discussed this method in his Saxophon-Schule of 1926 as being a technique of jazz musicians.[15] Cecil Leeson also mentions shaking the instrument as a method of vibrato production in his pamphlet The Saxophone Comes of Age of 1938.[16] This was the first method of vibrato production that he used before switching to jaw vibrato.[17] The following example will demonstrate the production of vibrato by shaking the instrument.

Performed Example 2. Vibrato produced by shaking the instrument.

It was the third method of vibrato production, jaw vibrato, which has proved to be the best for the saxophone. Rudy Wiedoeft championed it in his Three Talks to

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13. Clyde Doerr, Valse Hilda, performed by Clyde Doerr (Victor 19028 A, 1921).

14. Just Another Kiss, performed by Paul Biese, 1919 (Cecil Leeson Archives, Muncie, Indiana).

15. Gustav Bumke, Saxophon-Schule (Leipzig: Anton J. Benjamin, 1926), cited in Hemke, op. cit., 278.

16. Cecil Leeson, The Saxophone Comes of Age (Chicago: National School Band Association, 1938), 5.

17. Leeson, Interview with author, March 19-20, 1986.

Saxophonists of 1923.[18] He believed that the impulse vibrato was too fast and hard to control and that the proper way to produce vibrato on the saxophone was by alternately tightening or loosening the lips.

Wiedoeft began playing saxophone in 1911, making his first recording in 1917 already using a full vibrato. He influenced many saxophonists because of his great performing skill and stage presence. His style was a mixture of classical and popular elements, attempting to copy the contemporary violin style of Fritz Kreisler and Jascha Heifetz.[19] I will now perform Rudy Wiedoeft's first recorded solo, Valse Erica, with vibrato typical of Wiedoeft, still using the period wooden mouthpiece.

Performed Example 3. Rudy Wiedoeft, Valse Erica (New York: Robbins Music Corporation, 1917).

The 1920's became a transitional period for the use of vibrato on wind instruments that was reinforced by its widespread use in jazz and popular music. The Six Brown Brothers' popular vaudeville act helped spur the saxophone craze in America from 1910 to 1920. Popular dance orchestras of this time introduced vibrato in the winds to match the strings. Saxophones entered these bands as substitutes

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18. Rudy Wiedoeft, Three Talks to Saxophonists (Elkhardt, Indiana: H. A. Selmer Co., 1923), 4.

19. Granzow, op. cit., 49.

for the strings or the clarinets.[20] The Paul Whiteman Orchestra was one of the first to use a saxophone section of alto and tenor saxophones. In a recording of his group from 1921, the saxophones match the narrow, fast vibrato of the strings.[21] Marcel Moyse wrote in 1950, "I often ask myself where the general vibrato opinion would be if jazz hadn't come along as a powerful ally of those who turned in the vibrato direction fifty years ago. . . ."[22] Percy Grainger, composer and saxophonist, wrote an article for Etude Magazine in 1924 entitled "What Effect is Jazz Likely to Have Upon the Music of the Future?"[23] He included as one of the many great achievements of jazz the introduction of vibrato to wind instruments.

Two important classical saxophonists who began their careers in the 1920's, Cecil Leeson and Marcel Mule, each performed jazz or popular dance music and credit to varying degrees its influence on their own vibrato. Cecil Leeson, an American saxophonist, began studying the instrument in 1919. He chose as his model the foremost saxophone

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20. Eileen Southern, The Music of Black Americans: A History, 2nd ed. (New York: W. W. Norton and Co., 1971), 343-4.

21. Love Bird, performed by Paul Whiteman Orchestra, 1921 (Cecil Leeson Archives, Muncie, Indiana).

22. Moyse, "The Unsolvable Problem," II/9 (May 1950), 9.

23. Percy Grainger, "What Effect is Jazz Likely to Have Upon the Music of the Future?" The Etude Magazine (Sept. 1924), 593.

soloist of the day, Rudy Wiedoeft. As mentioned earlier, Leeson first produced his vibrato by shaking the instrument. After reading the Wiedoeft pamphlet, Three Talks to Saxophonists, he switched to jaw vibrato production. When asked if his performance of jazz music influenced his vibrato, Leeson stated that, no, the jazz band leaders often requested his vibrato to be wider, which was the style, but that he preferred to copy the more controlled vibrato of Rudy Wiedoeft.[24] The following recorded example demonstrates the vibrato of Cecil Leeson, performing "Meditative" from Concerto, Opus 26 by Paul Creston.

Recorded Example 5. Paul Creston, "Meditative," Concerto, Opus 26, performed by Cecil Leeson, Saxophone (Enchante' ENS-2005).

In France during the 1920's, Marcel Mule was playing saxophone with the Guarde Republicaine Band. At this time saxophonists, along with the other wind players, played virtually without vibrato. A former violinist, Mule felt that the expressive possibilities on saxophone seemed quite limited in comparison with the strings and the human voice. After World War I, Mule first heard American jazz saxophonists who made use of a very wide, pronounced vibrato. In 1921, he began to supplement his income by playing in

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24. Leeson, Interview with author, March 19-20, 1986.

jazz bands, learning to produce this intense vibrato. Mule was then forced to play in two completely different styles, with vibrato for jazz playing and without vibrato for his classical playing.[25]

At the World Saxophone Congress of 1979, Marcel Mule related his first experience of utilizing vibrato in his classical playing. In 1927, he was asked to perform various saxophone solo parts with the Paris Opera-Comique orchestra. One such part was for a new work titled "Evolution." This ballet included several popular dances of the time, one of which contained a saxophone solo in blues style. The passage was marked "very expressively, with vibrato." On the first reading, Mule played the passage without vibrato, but the composer insisted that he play with the indicated vibrato. Mule did as the composer asked, but tempered his vibrato somewhat from that which he had used in jazz, hoping to avoid "hostile reactions" in a place he "judged improper for this mode of expression." Contrary to what he expected, he received a favorable reaction from his peers and decided to add vibrato judiciously to all of his classical playing.[26]

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25. Marcel Mule, "Marcel Mule Addresses The Sixth World Saxophone Congress," trans. Mark Russakoff, The Saxophone Symposium IV/3 (Summer 1979), 6.

26. Ibid., 8.

CHAPTER III

PEDAGOGICAL DEVELOPMENTS IN JAW VIBRATO ON THE SAXOPHONE

Larry Teal, noted saxophone pedagogue, devotes extensive discussion to the various aspects of saxophone vibrato in his book, The Art of Saxophone Playing.[1] He states that characteristics of a good vibrato should include the following: flexibility of tone without an overemphasis of the pulsating quality, an even rate without being so wide that it becomes monotonous, and some variation in rate and extent. Four different types of vibrato production are discussed: lip, jaw, throat and diaphragm. Teal preferred the jaw production for saxophone because he felt it more adaptable to the instrument, resulting in greater control of the rate, amplitude, and shape of the oscillation.[2]

At the beginning, Teal recommends that vibrato should be developed as a mechanical skill. Exercises at measured speeds should be practiced with four pulsations to the beat at metronome speeds varying from sixty to ninety. This variation of speed control is necessary so that in perfor-

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1. Larry Teal, The Art of Saxophone Playing (Evanston, Illinois: Summy-Birchard Co., 1963), 54.

2. Ibid., 55.

mance, the speed of vibrato could be dictated by the music rather than by the performer's limits. After control develops, vibrato can then be applied to musical examples, avoiding a given number of pulsations to the beat. The pulsations of vibrato should eventually become independent of the tempo of the music.[3]

Cecil Leeson, in his dissertation, The Basis of Saxophone Tone and Production, also recommends jaw vibrato for saxophone.[4] He discusses the aspects of pitch variation peculiar to the instrument. The saxophone embouchure setting is close to the top of the possible pitch, thus it is physically impossible to extend the vibrato cycle other than a very small distance above the straight tone. The nature of the instrument causes most of the vibrato cycle to lie below the optimum pitch.

This statement is underscored in Teacher's Guide to the Saxophone by Fred Hemke of Northwestern University.[5] If diagrammed, the saxophone vibrato undulation would dip below actual pitch by .05 to .15 of a semitone and then return to the pitch.

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3. Ibid., 60.

4. Cecil Leeson, The Basis of Saxophone Tone Production: A Critical and Analytical Study, DFA dissertation, Chicago Musical College, 1955 (Muncie, Indiana: Enchanté Enterprises, 1978), 76.

5. Fred Hemke, Teacher's Guide to the Saxophone (Elkhart, Indiana: H. & A. Selmer, Inc., 1966),8.

Hemke, a student of Marcel Mule at the Paris conservatory, includes the Mule technique of vibrato instruction in the above-mentioned pamphlet. Mule suggested that the number of vibrato undulations should vary between 300 and 350 per minute. This would mean a variance from five to six undulations per beat at a metronome marking of sixty. Mule also stressed that the speed of vibrato should depend on the tempo of the music being performed.[6] The following recorded example of Marcel Mule demonstrates his system of vibrato production.

Recorded Example 6. Paul Creston, "With Tranquility," Sonata, Opus 19, performed by Marcel Mule, Saxophone (Selmer LPL 2012-LPL 2013).

In an Instrumentalist Magazine article, Rosemary Lang recommends establishing a stable, characteristic tone quality before beginning vibrato instruction.[7] In addition to techniques mentioned by previous authors, Lang discusses the alternation of vowel quality from "ah" to "ee" to correspond respectively to the lower and upper portions of the vibrato cycle. The air pressure should remain constant

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6. Ibid., 9.

7. Rosemary Lang, "Teaching Vibrato," Woodwind Anthology: A Compendium of Articles from The Instrumentalist Magazine on the Woodwind Instruments (Jan. 1963, Evanston, Illinois: The Instrumentalist Co., 1980), 792-793.

when performing jaw vibrato, but the actual intensity of sound fluctuates due to the changes in pressure on the reed. She also recommends a variance in speed from 320 to 360 beats per minute.

The Cecil Gold survey of saxophone performance practices and teaching in the United States and Canada asked respondents three questions concerning vibrato.[8] The first question asked how often they used vibrato in performance. All answered that they either always or usually used vibrato in performance. None answered that they only occasionally or never used vibrato. The second question was concerned with the type of vibrato production preferred. Of the seventy-five respondents, fifty-eight preferred jaw vibrato and fourteen preferred lip vibrato, while some commented that they used a combination of the two. Thirteen stated that they used throat vibrato; nine preferred diaphragm production. One respondent commented that he used diaphragm vibrato, due to the fact that he was an oboist, but taught jaw vibrato to his saxophone students.

The following exercises are recommended in some of the above-mentioned sources for developing vibrato on the saxophone. The first exercise, from the Rosemary Lang

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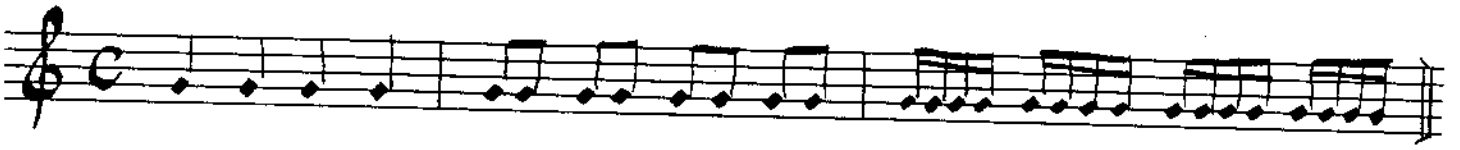
8. Cecil Gold, Saxophone Performance Practices and Teaching in the United States and Canada (Moscow, Idaho: School of Music Publications, University of Idaho, 1973), 29.

article, uses a varied rhythmic pattern to begin development of a regulated jaw vibrato.

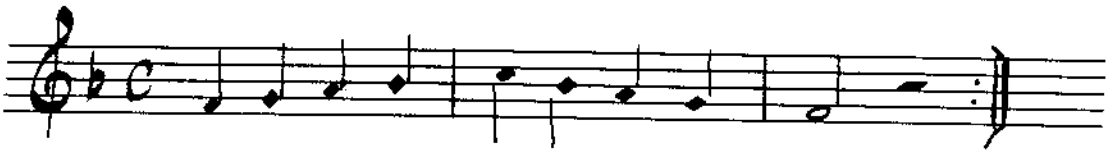
Performed Example 4. Rosemary Lang, "Teaching Vibrato," 793.



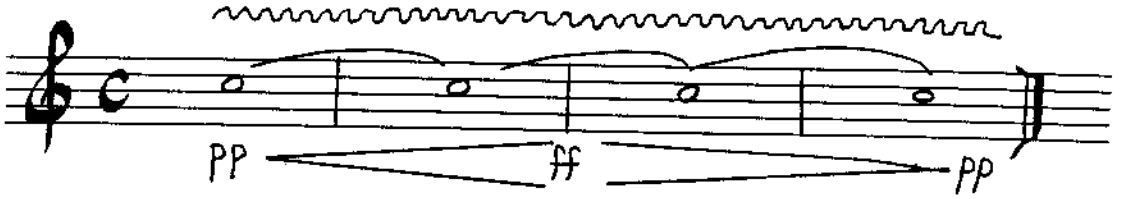
After the proper jaw motion is established, Larry Teal suggests the following additional exercises to develop vibrato control:

Performed Example 5. Larry Teal, The Art of Saxophone Playing, 57-59.

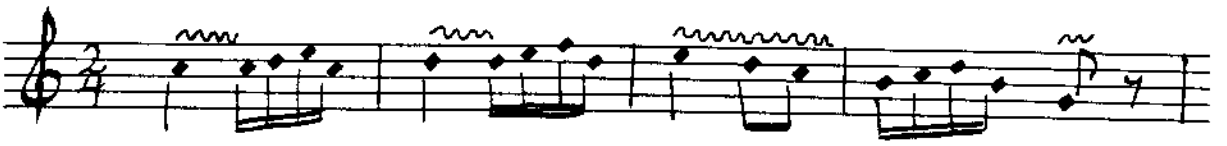
a. Quarter-note scale passages with four vibrato pulsations per beat.



b. Long tones with crescendo and diminuendo, keeping the rate and amplitude of vibrato constant.

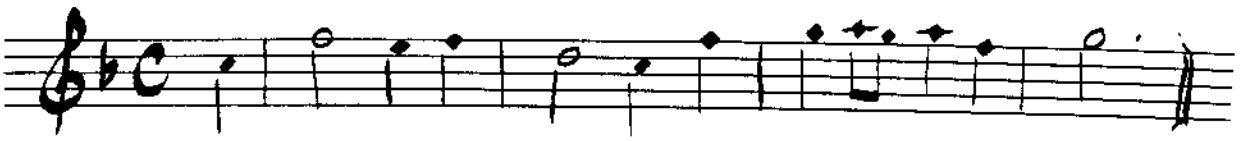


c. Alternating a long pulsating tone with an articulated or technical passage.



d. Alternating a straight tone with vibrato.

e. Simple melodies, first with a definite pulsation rate (four to a beat), then with an even rate but not tied to the rhythm or tempo of the melodies.



CHAPTER IV

VIBRATO AS AN EXPRESSIVE DEVICE

Once a performer develops control over his vibrato, then he can consider its function as an expressive musical device. Vibrato is just one of several ways of stressing notes in a musical phrase. A tone usually sounds better with vibrato, but it has a purely mechanical function unless it is under the expressive control of the player so that it can change as the character of the music changes. Given any group of notes, it is the one with a different kind of vibrato that will stand out.

Some of the ways that vibrato can be altered include increasing or decreasing the speed, widening or lessening the amplitude, and using non-vibrato.[1] We may equate various kinds of vibrato with various emotional states in music. The greater the amplitude, the more we are aware of it. Excited or intense music calls for a faster vibrato, together with greater amplitude. When performing accompanying figures, the vibrato should be more peaceful, or slower, and with less amplitude. A single note can be enhanced by starting the vibrato from nothing and then increasing both in speed and amplitude to the desired level.

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1. Arthur Weisberg, The Art of Wind Playing (New York: Schirmer Books, 1975), 130.

The exact degree of change to be introduced into the vibrato cannot be notated by the composer; it is left to the performer's taste. Familiarity with style, harmony and balance is necessary in order for the performer to know how to use vibrato as an expressive tool.[2]

The Carl Seashore Psychology of Music testing from 1938 includes extensive research on the subject of vibrato. Seashore defined vibrato as a "pulsation of pitch, usually accompanied by synchronous pulsations of loudness and timbre, of such extent and rate as to give a pleasing flexibility, tenderness and richness to the tone."[3] He went further to discuss vibrato as an element of musical expression. Seashore believed that vibrato was a physiological rhythm present in man, related to the vibration that occurs whenever paired muscles are "innervated under emotional tension. . . . The genuine vibrato is automatic and expresses emotions as truthfully as facial expressions."[4]

The Seashore tests also noted that solo parts gave performers more latitude for vibrato prominence than ensemble parts.[5] This statement is reinforced by a study of

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2. Ibid., 131.

3. Carl Seashore, Psychology of Music (New York: McGraw-Hill Book Co., Inc., 1938), 33.

4. Ibid., 51.

5. Ibid., 52.

string performance practices conducted by George Papich and Edward Rainbow in 1974.[6] The results of their testing concluded that while the speed and pitch width of vibrato are the same in solo playing and ensemble playing, the performers tended to use vibrato less often when performing in ensemble than when performing solo.

Saxophonists must also follow this example. In ensembles where many saxophones are used, a general rule is to eliminate vibrato for the sake of group intonation or blend, except for solo parts. A group or section of saxophones within an ensemble must learn to match styles of vibrato and to eliminate it for specific effects.[7]

Differences in styles of vibrato among individual saxophonists can easily be noted, due to the fact that vibrato is such a personal means of expression. Some generalizations can be made about differences in vibrato styles between the American and French schools of saxophone playing. When asked to define the differences between the two schools, respondents to the Cecil Gold survey stated that the greatest difference between French and American saxophonists came in the area of vibrato. The French sound

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6. George Papich and Edward Rainbow, "A Pilot Study of Performance Practices of Twentieth-Century Musicians," Journal of Research in Music Education XXII (1974), 33.

7. Hemke, Teacher's Guide, 10.

is largely defined by a fairly rapid, wide, more constant vibrato, while the American concept of vibrato is slower, more varied in width and speed, and used less often.[8]

The following recorded examples will demonstrate the basic differences in vibrato concept between French and American saxophonists. The first example (Recorded Example 7), is performed by Jean-Marie Londiex of the Bordeaux Conservatory, a student of Marcel Mule. His vibrato is fairly constant, with little variation in speed and some variation in depth. He is performing "Modéré" from Scaramouche by Darius Milhaud.

Recorded Example 7. Darius Milhaud, "Modéré," Scaramouche, performed by Jean-Marie Londiex (Golden Crest RE 7066).

The performer of the next example (Recorded Example 8) is American saxophonist Fred Hemke. A student of Marcel Mule, Hemke exhibits the more constant vibrato of the French school, while making some use of non-vibrato, characteristic of the American school. The work is An Abstract by David Ward.

Recorded Example 8. David Ward, An Abstract, performed by Fred Hemke (Lapider RG-576).

Eugene Rousseau, performer of the next example (Recorded Example 9), exhibits the American style of vibrato, even

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8. Gold, op. cit., 32-35.

though he did some of his saxophone study with Marcel Mule. Rousseau's vibrato varies in both speed and amplitude to fit the musical phrase. The technique of non-vibrato is also evident. He is performing "Largo" from Sonata for Piano and Cello, Opus 65 by Frederic Chopin, arranged by Rousseau.

Recorded Example 9. Federic Chopin, "Largo," Sonata for Piano and Cello, Opus 65, performed by Eugene Rousseau (Coronet 1601).

The American vibrato style can easily be distinguished in the final example of Donald Sinta (Recorded Example 10), performing "Adagio" from Sonata by Bernhard Heiden. His vibrato varies a great deal in both speed and amplitude. He also makes frequent use of non-vibrato to emphasize notes. Sinta is Professor of Saxophone at the University of Michigan and studied with Larry Teal.

Recorded Example 10. Bernhard Heiden, "Adagio," Sonata, performed by Donald Sinta (Mark MRS 22868).

Even though each performer's vibrato is distinctive, the basic differences in French and American styles are evident.

Having studied primarily with American-trained saxophonists, my current vibrato may be categorized as being of the American school. To demonstrate, I will perform the second movement,"With Tranquility" from Sonata, Opus 19, by Paul Creston.

Performed Example 6. Paul Creston, "With Tranquility," Sonata, Opus 19 (Delaware Water Gap, Pennsylvania: Shawnee Press, Inc., 1935).

CHAPTER V

VIBRATO AS A CONTEMPORARY, AVANT-GARDE TECHNIQUE

Currently, saxophonists must acquire vibrato control in order to perform in any type of situation, from Guy Lombardo style to the French school, encompassing all speeds and widths. Flexibility of vibrato is so crucial that young saxophonists should be exposed to as wide a variety of styles as possible.[1]

This flexibility is even more critical in the performance of contemporary music. Vibrato manipulation is an important contemporary technique, easily mastered on the saxophone. Examples can range from no vibrato to "vibratissimo" with every possible gradation in between.[2] Graphic representation of vibrato speed is a very effective means of notation for communicating the desired vibrato speed to the performer. The following chart (Figure 2) shows examples of graphic notation of vibrato from New Sounds for Woodwind by Bruno Bartolozzi.

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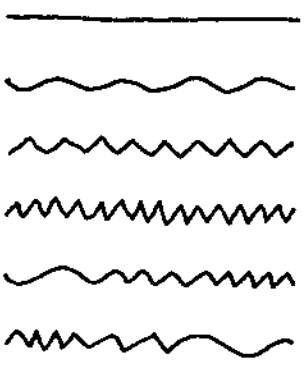
1. Gold, op. cit., 31.

2. Bruno Bartolozzi, New Sounds for Woodwind, trans. and ed. Reginald Smith Brindle (New York: Oxford University Press, 1967), 24.

Figure 2. Graphic notation of vibrato.[3]



Ronald Caravan, in his Extensions of Technique for Clarinet and Saxophone, suggests using the abbreviations "vib." or "v." to indicate vibrato, and "non vib." or "n.v." to indicate no vibrato. He suggests notating differences in vibrato width or amplitude by increasing or decreasing the depth of the wave.[4]

One example of a contemporary saxophone work that employs the technique of vibrato manipulation is Improvisation I by Ryo Noda.

Performed Example 7. Ryo Noda, Improvisation I (Paris: Leduc, 1972).

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3. Ibid., 25.

4. Ronald L. Caravan, Extensions of Technique for Clarinet and Saxophone, DMA dissertation, University of Rochester, Eastman School of Music, 1974 (Ann Arbor, Michigan: University Microfilms, 1974), 200, 203.

CHAPTER VI

CONCLUSION

Vibrato has developed from Renaissance and Baroque times in which it played a minor role as an ornamental device, through the Classical and Romantic periods when it was sparingly used for expressing passionate feelings, to the twentieth century in which it has become a vital part of musical expression.[1] What caused this emancipation of vibrato? A combination of factors can be cited: the popularity of individual soloists such as Fritz Kreisler, Jascha Heifetz, Marcel Moyse and Rudy Wiedoeft, an abundance of methods and tutors, and the influence of jazz and popular music.

A question remains as to whether one should perform works written prior to 1920 with vibrato. Vibrato should be adjusted to the style and period of music played; it must be relative and flexible to the character of the music. When a Baroque piece is played, a performer should perhaps adjust his vibrato to a more ornamental function.[2] A decision must

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1. Weisberg, op. cit., 100.

2. Sigurd Rascher, "The Rational Saxophone," Woodwind Magazine II/9 (May 1950), 9.

be made by the performer as to how strictly he should follow performance practice from the time period of the music involved.

Larry Teal believed that vibrato should be an "honest, sincere utterance based on a sensitive control of all the instrumental, musical and artistic knowledge of the performer."[3] Marcel Mule remarked that "just as for the string instruments, vibrato confers on the saxophone all its expressive intensity."[4] Sigurd Rascher, European saxophonist who immigrated to the United States in the 1930's, summarized his philosophy of vibrato as follows: "The production and use of vibrato ought to be governed by artistic purposes and aims."[5] The key to effective vibrato usage is to develop vibrato skills to the level of flexibility that the performer is capable of performing in any manner he chooses, enabling him to support the emotional character of any style of music.

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3. Teal, op. cit., 54.

4. Marcel Mule, "The Saxophone," Woodwind Anthology (April 1958), 787.

5. Sigurd Rascher, Letter to the author, May 22, 1986.

APPENDIX

PERFORMED EXAMPLES

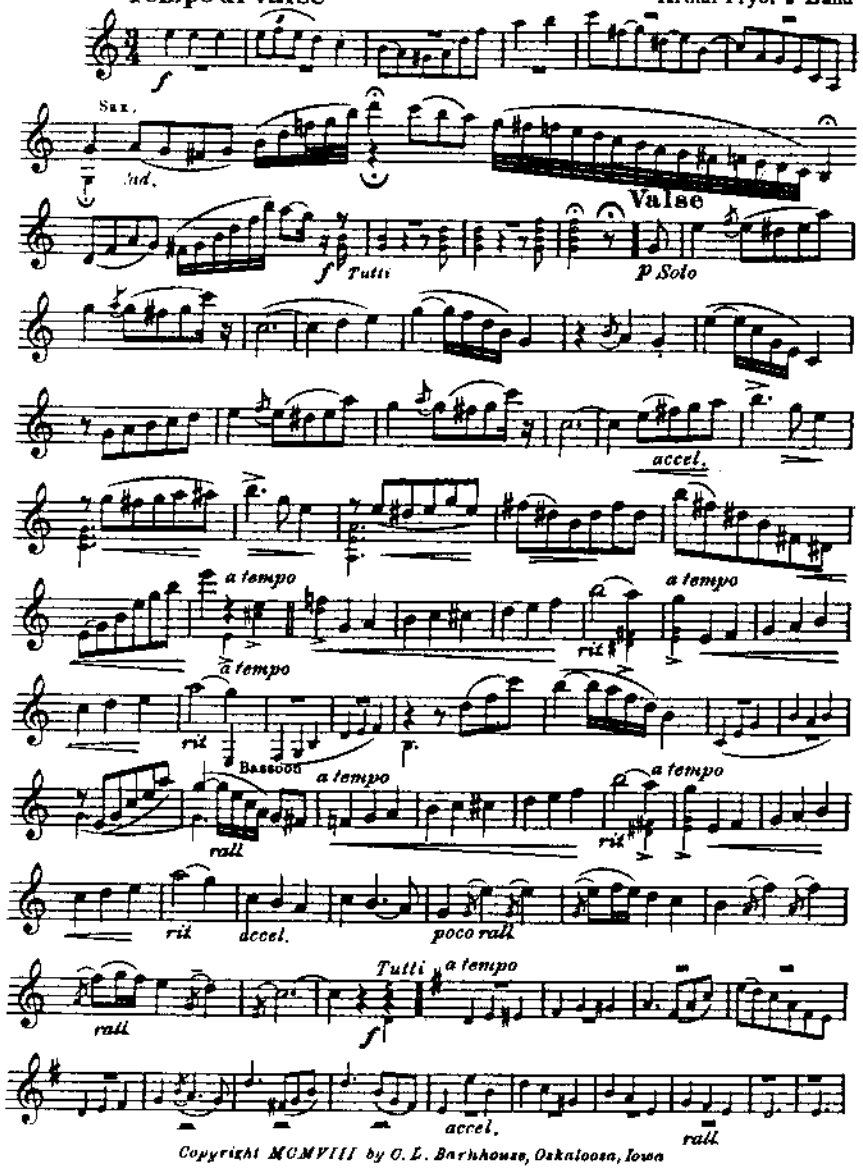
Cheerfulness

Valse Caprise

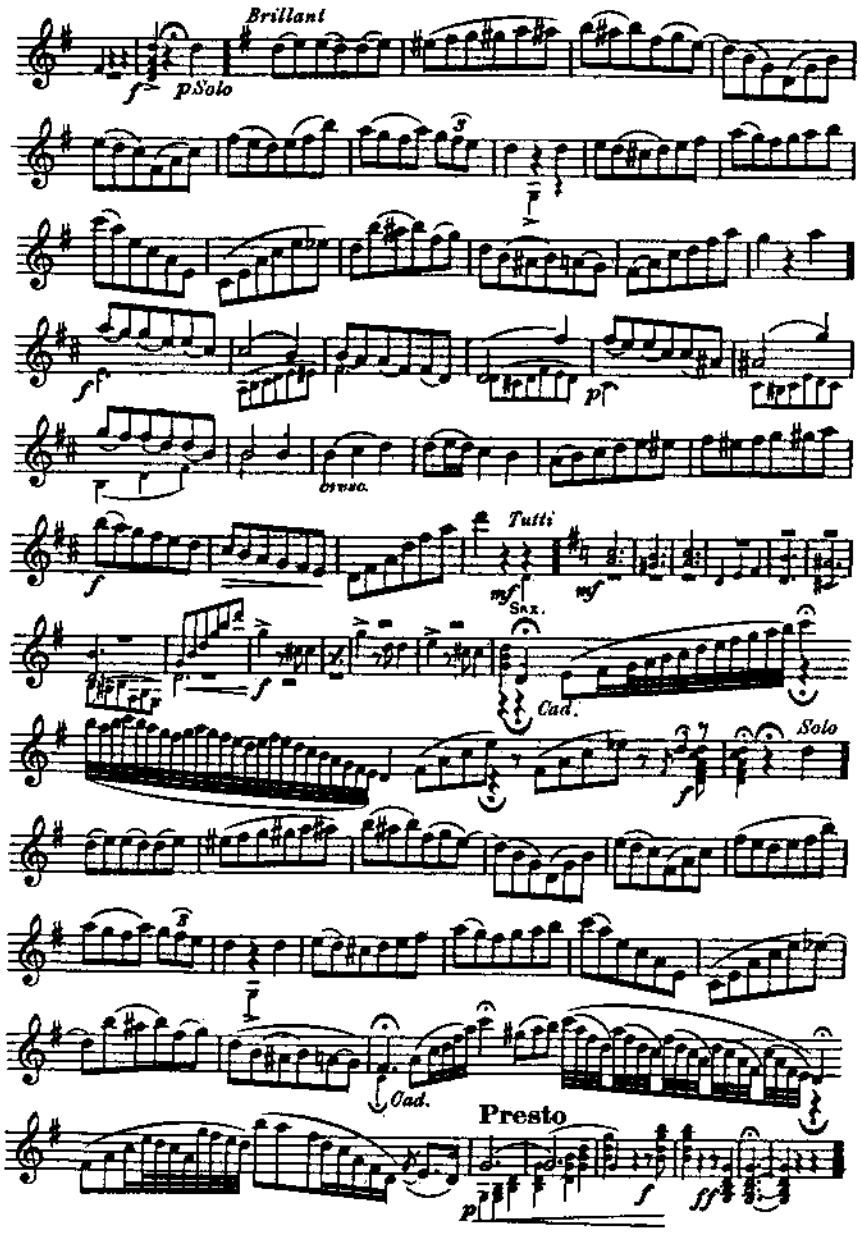
E♭ Alto Saxophone

BEN VEREECKEN
Saxophone Soloist
Arthur Pryor's Band

Tempo di Valse



E♭ Alto Saxophone

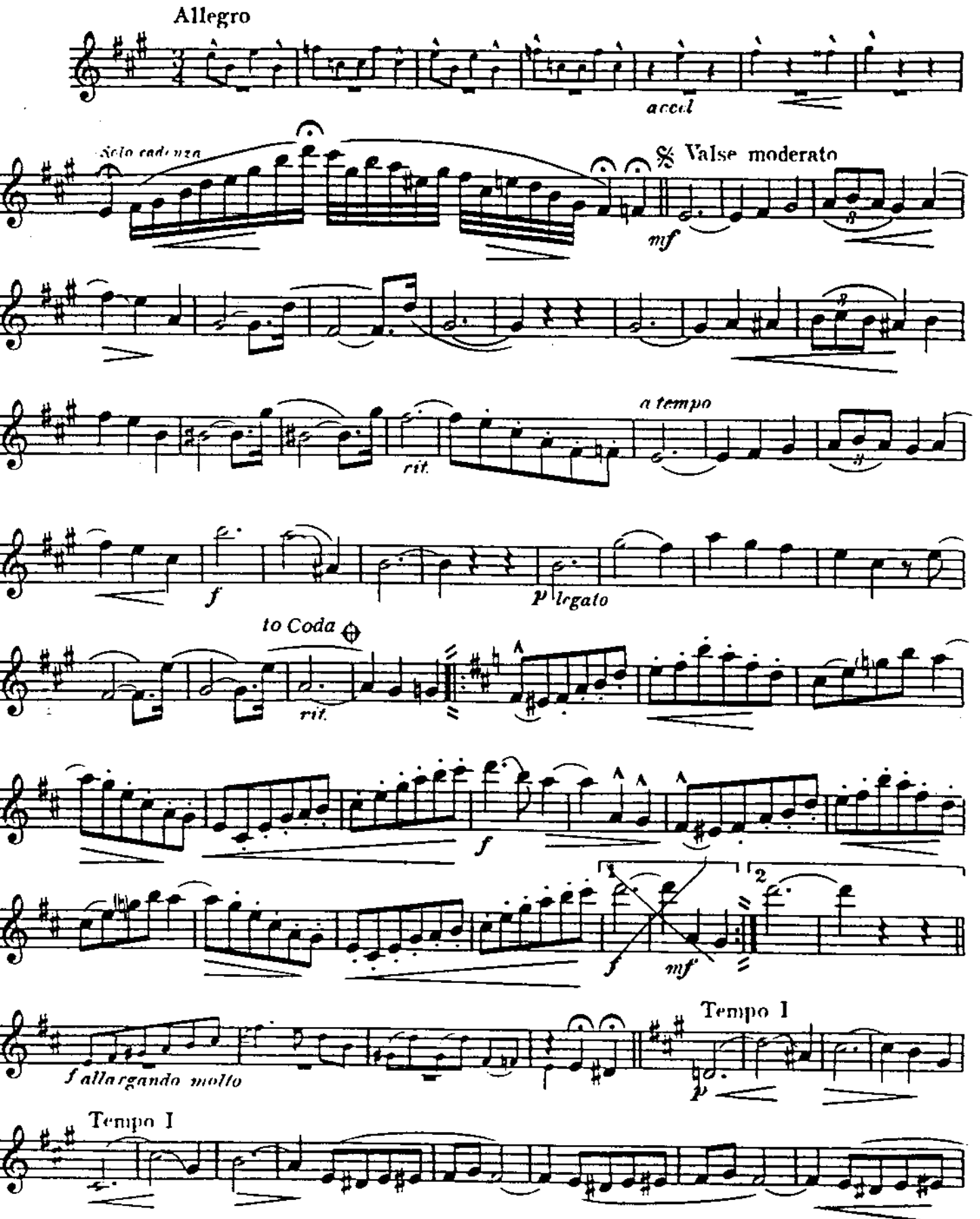


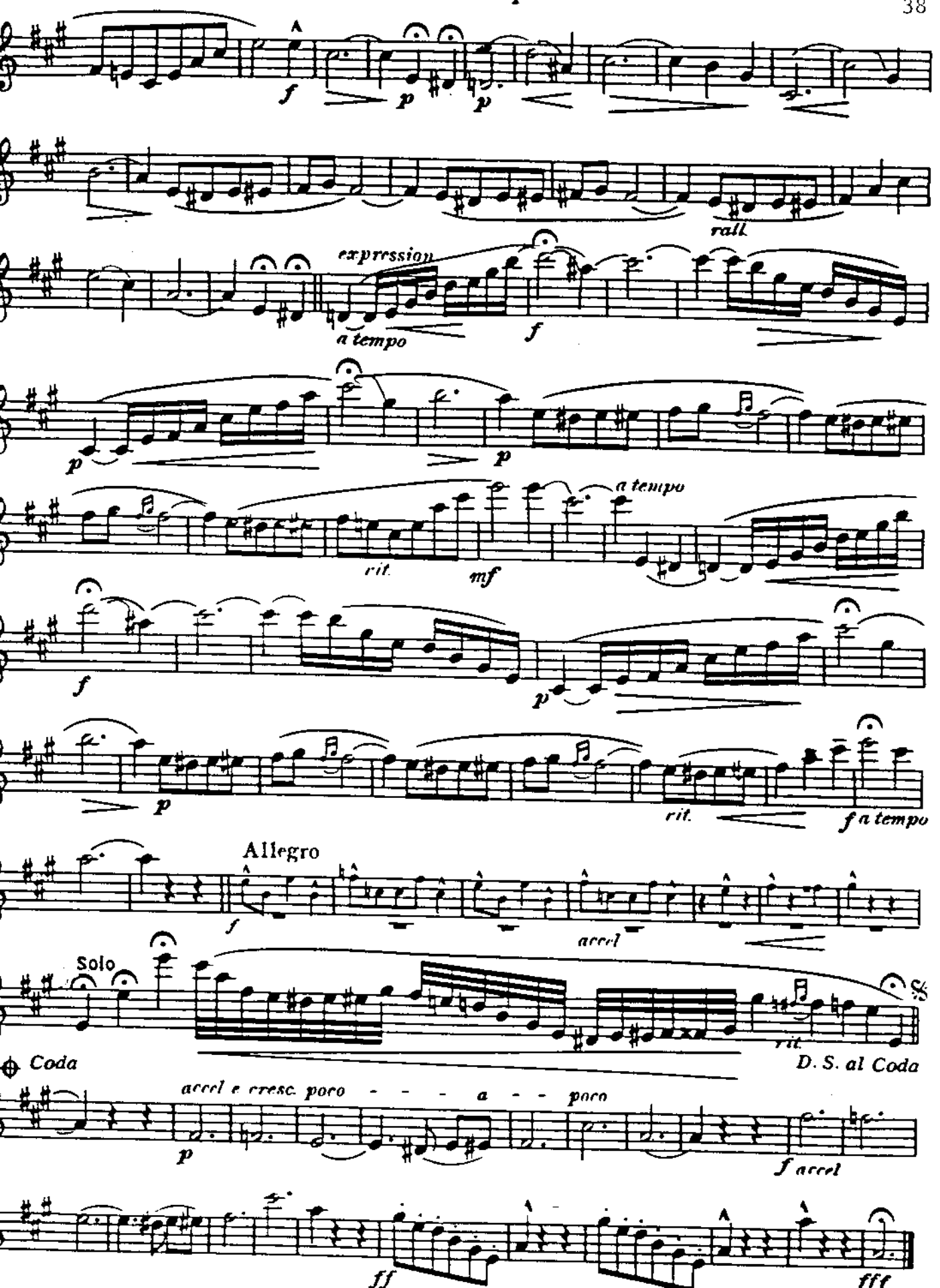
Dedicated to Mrs. Erica Noll

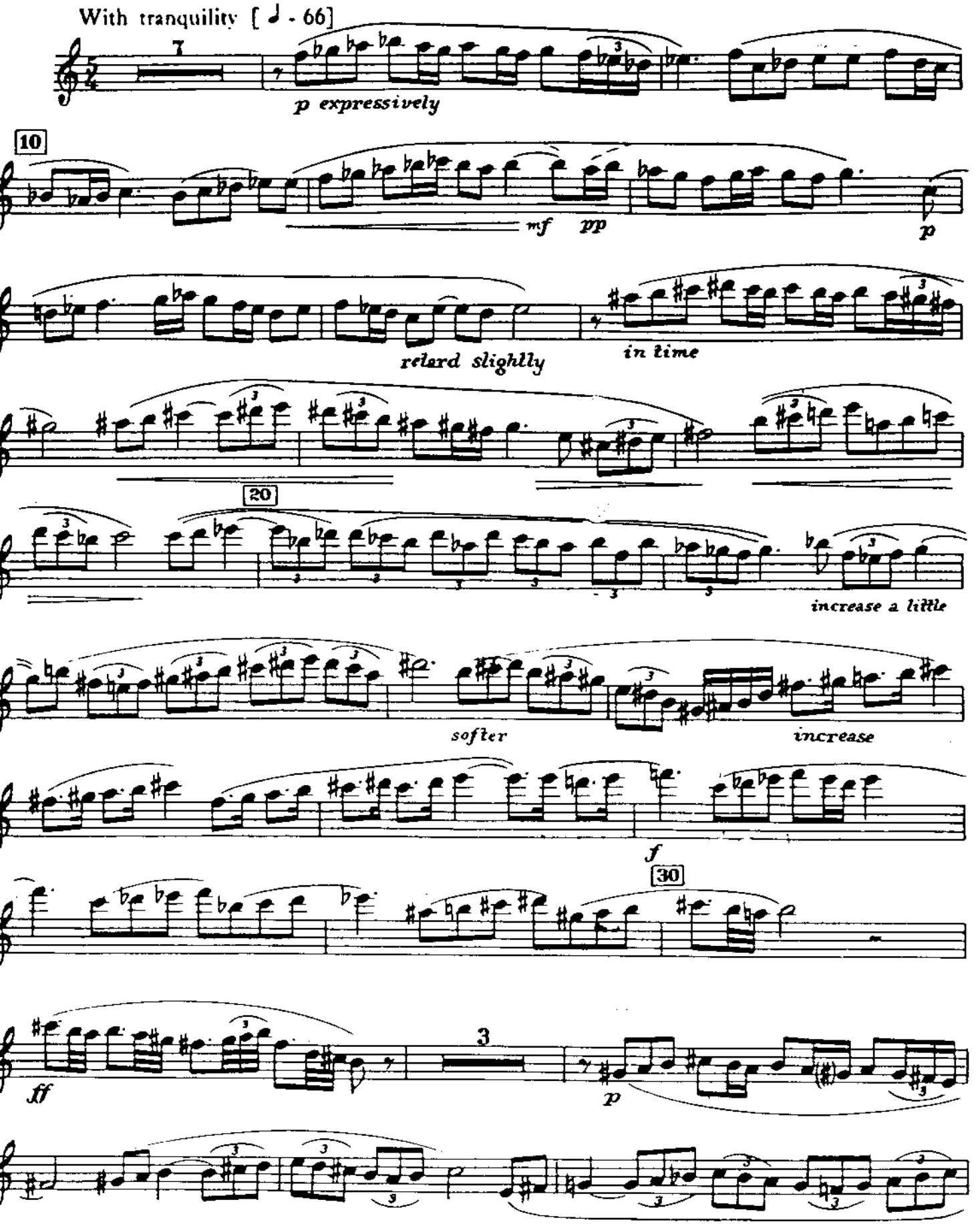
VALSE ERICA

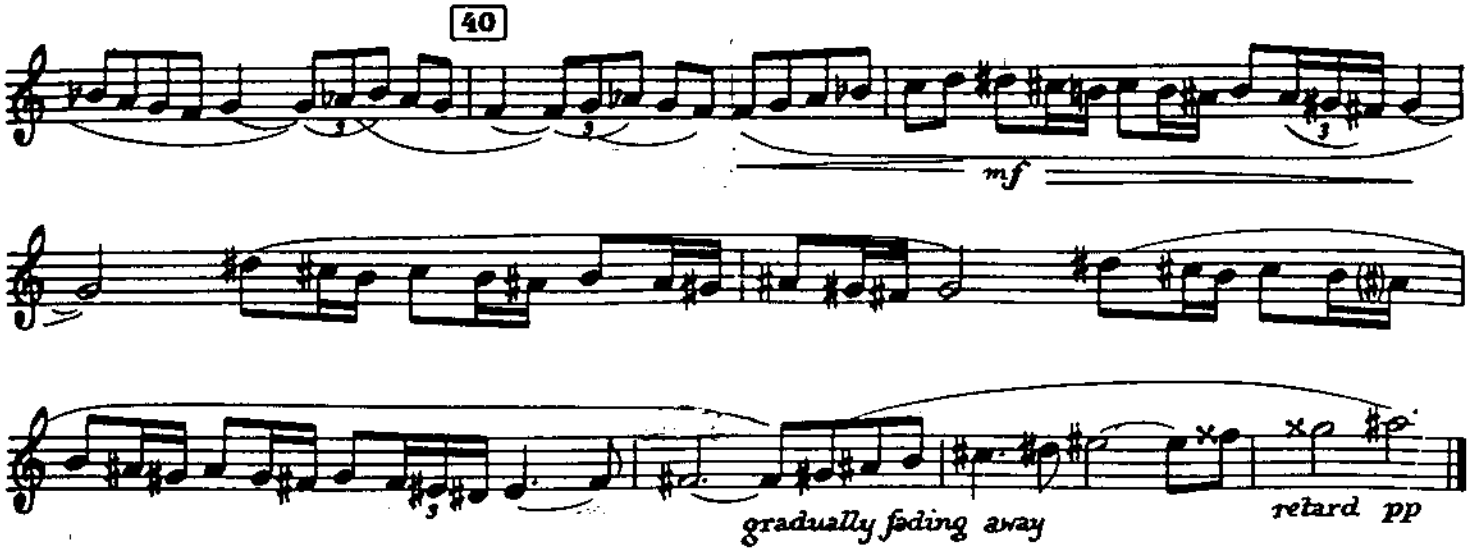
E♭ Alto Saxophone

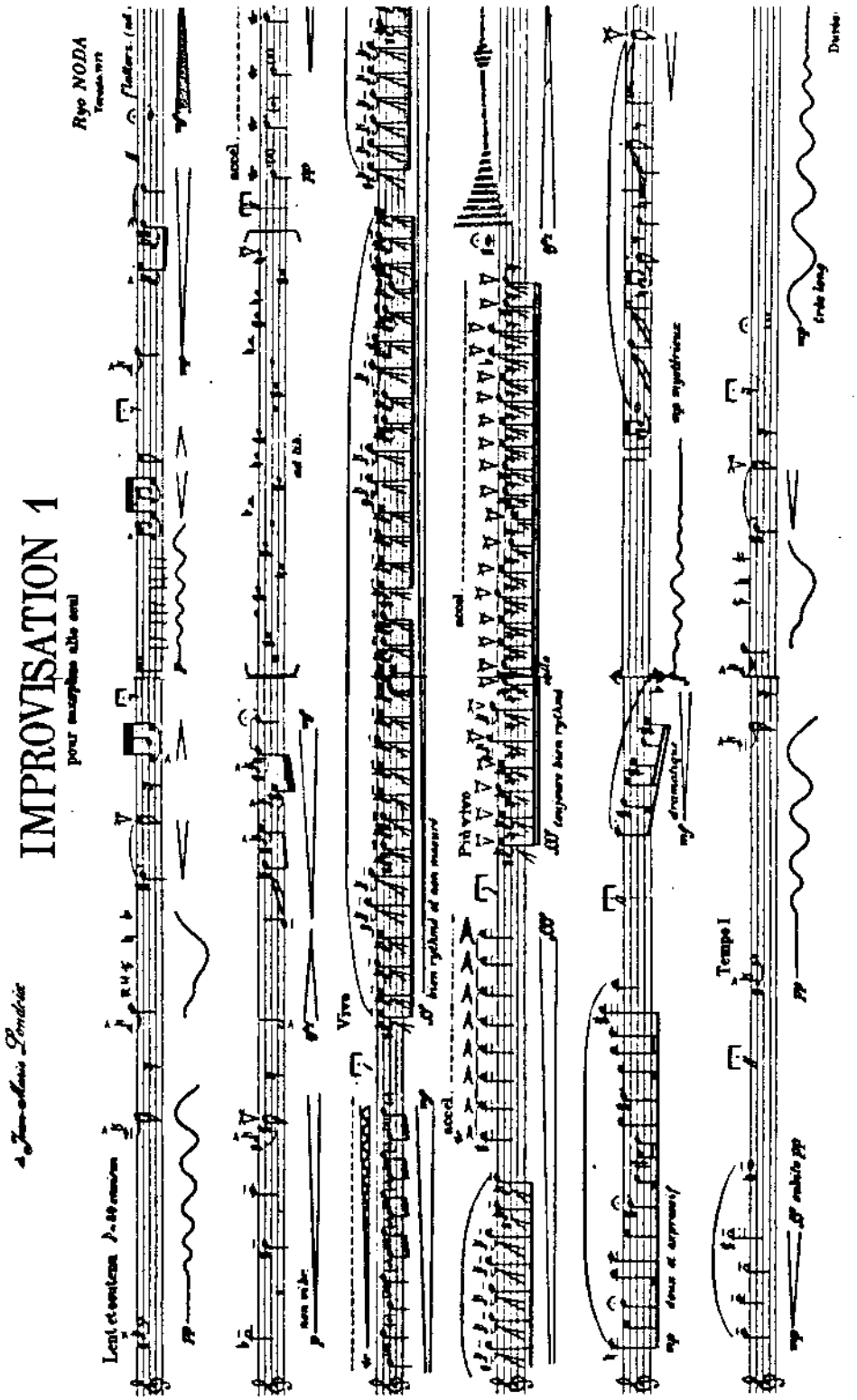
RUDY WIEDOEFT




f
p
p
rall.
expression
a tempo
f
p
p
a tempo
rit.
mf
f
p
p
rit.
f a tempo
Allegro
f
accel
Solo
rit.
Coda
D. S. al Coda
accel e cresc. poco - - - a - - poco
p
f accel
ff
fff


With tranquility [♩ - 66]
7
p expressively
10
mf
pp
p
relard slighlly
in time
20
increase a little
softer
increase
f
30
ff
3
p





IMPROVISATION 1 by Ryo Noda. Copyright 1972, Alphonse Leduc, 175 rue Saint-Honore, 75040 Paris Cedex 01. Reprinted with permission.

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