A Comparative Study of Slide Technique for the Trombone

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A COMPARATIVE STUDY OF SLIDE TECHNIQUE
FOR THE TROMBONE

A Covering Paper
Presented to
the Graduate Faculty
Central Washington State College

In Partial Fulfillment
of the Requirements for the Degree
Master of Music Education

by
James T. McDowell
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APPROVED FOR THE GRADUATE FACULTY

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R. D. Gustafson
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. THE PURPOSE AND DEFINITIONS OF TERMS USED</td>
<td>1</td>
</tr>
<tr>
<td>The Purpose</td>
<td>1</td>
</tr>
<tr>
<td>Definitions of Terms Used</td>
<td>1</td>
</tr>
<tr>
<td>II. LITERATURE PERTAINING TO SLIDE TECHNIQUE</td>
<td>3</td>
</tr>
<tr>
<td>Slide Technique</td>
<td>3</td>
</tr>
<tr>
<td>Holding the Trombone</td>
<td>4</td>
</tr>
<tr>
<td>Manipulation of the Slide</td>
<td>6</td>
</tr>
<tr>
<td>III. DESCRIPTION OF THE QUESTIONNAIRE</td>
<td>13</td>
</tr>
<tr>
<td>Part One</td>
<td>13</td>
</tr>
<tr>
<td>Part Two</td>
<td>13</td>
</tr>
<tr>
<td>IV. ANALYSIS OF THE QUESTIONNAIRE</td>
<td>15</td>
</tr>
<tr>
<td>General Questions</td>
<td>15</td>
</tr>
<tr>
<td>Slide Technique</td>
<td>16</td>
</tr>
<tr>
<td>V. CONCLUSIONS AND RECOMMENDATIONS</td>
<td>18</td>
</tr>
<tr>
<td>BIBLIOGRAPHY</td>
<td>22</td>
</tr>
<tr>
<td>APPENDIX</td>
<td>24</td>
</tr>
</tbody>
</table>
### LIST OF FIGURES

<table>
<thead>
<tr>
<th>TABLE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Hand position in Clarke's Method</td>
<td>18</td>
</tr>
<tr>
<td>II. Hand position in Young's Method</td>
<td>19</td>
</tr>
<tr>
<td>III. Hand position in Arban's Method</td>
<td>19</td>
</tr>
</tbody>
</table>
A COMPARATIVE STUDY OF SLIDE TECHNIQUE
FOR THE TROMBONE

CHAPTER I

THE PURPOSE AND DEFINITIONS OF TERMS USED

The trombone, because of its slide, is unique among commonly used brass instruments. The slide creates problems with the trombone that are of no concern on other brass instruments. It would seem logical that much would be written about such an important phase of trombone playing, but this is not the case. Relatively little has been written about the holding and manipulation of the slide.

I. THE PURPOSE

Professional trombonists and teachers of the instrument do not agree on the various aspects of slide technique. The purpose of this paper is to compare slide techniques for the trombone. Therefore, basic concepts of holding the instrument will be examined, as well as concepts about the manipulation of the slide.

II. DEFINITIONS OF TERMS USED

Slide-arm technique. The use of the hand, wrist, and arm in the manipulation of the trombone slide.
Slide-arm. The arm used by the trombonist to manipulate the slide.
CHAPTER II

LITERATURE PERTAINING TO SLIDE TECHNIQUE

Many of the standard method books for trombone were copyrighted in the early 1900's. Therefore they refer to the older type of slide technique, rather than the newer technique.

**Slide technique.** Most of the standard method books and trombone teachers such as Ernest Clarke and Ernest Lyon advocated stopping the slide for all notes. Clarke wrote:

> The right hand should put the slide as positively and mechanically as possible in the correct place and hold it firmly there until required by the music to move instantaneously to some other position. (5-6)

According to Lyon:

> If you are playing a series of staccato tones, as soon as you stop one tone the slide should be moved to the position for the tone to be played at the proper time. (13-42)

(Klingensmith writes: This is,)

> ...Being replaced by a new slide technique which advocates only stopping the slide during legato passages and when notes are of such duration that a glissando would result if the slide did not stop. (10-2)

There is almost no written information about this technique. The method books that do mention the newer technique do not give a very clear or complete explanation. For example Arban's Method states:

> The slide must be held freely and glide easily. . . . The player, in doing so must try to reverse the thought of stopping at any point half-way by remembering to strike as the slide passes the note. (16-62)
This newer technique requires the use of a flexible wrist, whereas the method taught by Clarke did not allow the wrist to bend. The slide is moved from one position to another by a very relaxed arm and wrist without stopping the slide.

**Holding the trombone.** Changes have also been made in the manner of holding the slide and in the use of the right arm and hand in manipulating the slide. Most of the standard method books give very little if any information as to the proper manner of holding the slide or instrument. The Langey method states, "The trombone is held with the left hand, the right hand moves the slide" (11-6). Arban's Method has a more thorough explanation:

The entire weight of the trombone should be sustained by the left hand. The slide should be freely thrown between the thumb and fingers of the right hand, using the elbow and wrist like hinges to lengthen the reach and not forgetting that the player must learn to throw the slide to the finger-tips for the seventh position. Modern players use no tension in the right hand as relaxation will enable a freer system of shifting when using elbow and wrist. (16-11)

Clarke's Method states:

The left hand should grasp the instrument firmly. The third and fourth fingers should hold the tubing securely against the palm of the hand. This is important, for the weight of the instrument should be sustained entirely by the left hand. The right should be employed to hold and control the slide. The thumb and first and second fingers should grasp, positively, the lower part of the cross-piece. The end of the thumb should be held firmly on the cross-piece, next to the lower slide, almost in the corner. The little finger should extend beneath the lower slide when in the shorter positions. When in the longer positions the little finger need not remain under the slide. The thumb should never leave the cross-piece. The wrist should not bend, but should be held so as to always
form a straight line from elbow to the end of the thumb. (5-3)

None of these explanations are very complete, and of course the explanation by Clarke is about the position for the older technique. A much more complete explanation of how to hold the instrument as well as the position of the body in playing is given by Richard Klingensmith in his *Techniques of Trombone Playing*:

The importance of correct playing position must be stressed. When the body is in an unnatural or cramped position, the desired relaxation cannot be achieved. First, the player must sit well forward on his chair. His back should not be near the back of his chair. This will put him in a position of alertness and do away with the tendency to slump,. . . . It will help if the chair has a flat seat as it is annoying to be continually sliding back from the edge of the seat. The players back should be straight from the hips to the neck, his head held at a normal angle and his shoulders down and slightly forward. The body should be inclined slightly forward so that a position of balance may be felt. The legs should be spread at about a forty-five degree angle and the feet should rest flat on the floor. The right shoulder should be held slightly forward. The right elbow should be held away from the body (30 to 45 degrees) and it should reach forward six to eight inches in front of the chest when the slide is held in first position.

The slide should be grasped with the thumb and first two fingers of the right hand, the palm facing the player. This will allow a maximum of wrist flexibility.

Left hand positions vary with different models and sizes of trombones, but generally the thumb should rest along and under the bell section receiver instead of being wrapped around the bell section brace. Also, the index finger should be extended across the slide section above the brace. The other fingers are wrapped below the slide section brace. This will support the horn very well and will give a feeling of balance. Keeping the wrist straight and the elbow away from the body is very important because of the tendency
of the mouthpiece to pull off-center to the left, and occasionally for the head to be inclined to the left, when this position is not maintained. (10-6)

This gives a very thorough introduction to the correct way to hold the instrument and the position of the body when playing. It is much more detailed and covers many of the problems found among high school and college trombone students.

**Manipulation of the slide.** None of the standard method books give much information about the manipulation of the slide. Langey's method simply states, "the right hand moves the slide" (11-7). Davis gives a more thorough explanation in his *Imperial Method*:

> The action of pushing or drawing the slide from one position to another should always be in a straight line by one stroke only of the fore-arm (or wrist if the distance be short,) either fore-arm or back. (6-17)

Even though this explanation is better it is not thorough enough, and according to most experts the slide should always be pulled, not pushed.

> The right hand must not support any of the weight of the instrument. This will hinder the slide technique, slow down the action, and cause more friction. With the weight entirely in the left hand, the right hand is free to operate the slide in a relaxed manner. The hand position used to hold the slide is of great importance to a good slide technique. According to Graham:

> The slide should be gripped with the thumb and the first two fingers at the base of the slide brace next to the lower tube . . . . (7-83)
The other two fingers may be placed below the lower tube or just curled up toward the palm of the hand. A relaxed and freely moving wrist is very important in the development of a smooth slide technique. Graham writes, "It must be held in a position relatively parallel to the brace to achieve this freedom of motion and flexibility that is desired" (7-83). In other words, the palm of the hand must be toward the player at all times. This position is in contrast to the position advocated by Clarke and others. Although Clarke recommended the slide be grasped with the thumb and first finger, the other fingers were laid on the lower tube and the little finger was placed underneath the tube. In this position the palm is not toward the player, but is toward the floor. This position results in a stiff, rigid wrist. Today most teachers recommend a flexible wrist. This allows the wrist to be used more advantageously in changing direction of the slide movement.

Klingensmith writes, "There are two basic slide techniques which must be learned: legato and staccato slide-arm" (10-39). When playing a slow, sustained, legato passage on the trombone, a glissando will result if the slide is not stopped. Therefore, the slide must be stopped on each note, but the movement between the notes must be very fast and smooth. The wrist and arm must remain relaxed so that the instrument does not move about in a jerky manner. The use of the wrist makes for greater smoothness and much quicker changes of position than arm movement. The tone should be held for its full value and then the wrist must be ready to snap quickly to
the next tone. For fast tongued passages a different technique is used. The slide is not stopped in playing this type of passage.

Kleinhammer writes:

Eventually the tempo will become such that stopping at each tone will become impractical or impossible. At this point keep the slide in motion, playing each tone as you go by its respective position. (9-58)

Included in this study are some exercises that are very useful in developing a smooth slide technique. All should be played without stopping the slide.

All the exercises in section I include part of a chromatic scale. Exercise IA should be played with the wrist to develop flexibility. It should be started at a moderate tempo and gradually increased in tempo. The other exercises should be played in the same manner, but with more arm movement.

I.
A.

B.

C.

D. E.
These exercises emphasize whole steps. They are played similar to those in section IB-E.

II.
A.

B.

Section III involves the use of whole and half steps. There is a difference in the speed of the slide when playing the whole or half step, but the slide should not be allowed to stop.

III.
A.

B.

Section IV uses two half steps and a whole step. The whole step does not always come in the same place in all exercises.

IV.
A.

B.

C.

Section V combines the intervals that have been used in Sections I through IV. The problem in these exercises is intonation
and smoothness of execution.

V.
A.
B.

c.

These exercises are similar to Section V in the problems involved. The difference is one of meter.

VI.
A.
B.

c.

Section VII uses a combination of one and a half steps along with whole and half steps. The slide must be moved faster when the tones are farther apart.

VII.
A.
B.
C.

D.
E.
F.
The problems in this section are similar to those in Section VII.

VIII.
A.

Section VIII is a mixture of problems found in all of the previous exercises.

IX.
A. B. C. D.

The etudes should be used along with the slide-arm exercises. The same slide patterns are used, but in different registers. They should be played fast and in one breath. Care must be taken to play the alternate positions in-tune.
Many teachers recommend the use of scales, arpeggios, and etudes to develop smooth slide technique. The *Melodious Etudes for Trombone*, by Joannes Rochut, is recommended by most trombone teachers for use in the development of a legato slide technique, as well as for smoothness.
CHAPTER III

DESCRIPTION OF THE QUESTIONNAIRE

Part one. The questionnaire used for this paper was a short two page form. Part one was made up of six general questions. The purpose of these questions was to establish the qualifications of the trombonists that were contacted. Three of the questions concerned teaching experience. One dealt with playing experience, and one with training. The final question in part one determined which make of trombone these experts prefer.

Part two. This part of the questionnaire included eleven questions involving slide technique. Subjects covered were: the wrist, legato slide technique, staccato slide technique, use of slide patterns to develop smoothness, use of alternate positions, use of fourth position for D', and the thumb position on the cross-bar.

The final question and the second page of the questionnaire concerned hand positions. Seven different types of hand positions were drawn, and the experts were asked to choose the one preferred.

The following is a listing of the trombonists to whom the questionnaires were sent:

John Baker, Garfield, Washington*
Ira Lee, University of Oregon*
P. C. L. A.*
John Christie, Editor, The Instrumentalist*
Lawrence Weinman, Minneapolis Orchestra*
Leon Brown, North Texas State College*
William Cramer, University of Florida*
Ken Cloud, Seattle Orchestra*
Thomas Beversdord, Indiana University*
Jack Nowinski, Private Teacher N.Y.C.*
Glen Smith, University of Michigan*
George Roberts, Professional Artist*
George Lotzenitiser, Eastern Washington*
Edwin Baker, Colorado State University*
Dick Klingensmith, Teacher N.Y.C.*
Allen Ostrander, New York Philharmonic
Gordon Paulis, Toronto Orchestra
Emory Remington, Eastman School of Music
Howard Cole, Philadelphia Orchestra
Edward Kleinhammer, Chicago Orchestra
Bill Robinson, Fresno, California
Robert Marsteller, Los Angeles Orchestra

*The star indicates the questionnaire was returned. The percentage of returns was 68%. 
CHAPTER IV

ANALYSIS OF THE QUESTIONNAIRE

General questions. All but one of the respondents have taught on all levels of ability from elementary to professional. George Roberts is the only one who is not actively concerned with teaching either privately or in the public schools (93%).

Only two of the respondents did not have experience playing with a professional symphony orchestra. They were Glen Smith and Ira Lee (86%).

Three of the respondents did not have former students playing with a symphony orchestra. The three were John Baker, John Christie, and Lawrence Weinman (71%). Only one, John Christie, did not have a former student playing with a jazz or popular music group (93%).

The number of years of teaching experience varied from nine to thirty, with the average being eighteen.

A list of teachers with whom these experts studied included: Robert Marsteller, Los Angeles Orchestra; Jaroslav Cimera, University of Chicago (2); Emory Remington, Eastman School of Music; Glen Smith, University of Michigan (2); Allen Ostrander, New York Philharmonic; Keith Brown, Curtis Institute; Jack Nowinski, private teacher N.Y.C. (2); Richard A. Klingensmith, teacher N.Y.C.; William A. Billingsley, University of Idaho (2); Hugh McMillen, University of Colorado; Thomas Beversdorf, Indiana University; Louis Van Haney, Indiana University; William Bell, New York Philharmonic; and Walter Welke,
The largest majority of these experts prefer the Conn trombone (73%). The others mentioned were Bach (13%), Olds (7%), and a special made Earl Williams (7%).

**Slide technique.** 79% of the experts teach the no-stop method for fast staccato playing. One expert said he uses a combination of stopping and not stopping the slide. Leon Brown, who "does not strongly advocate the no-stop technique" wrote that he would recommend it for very advanced students and then "only for certain passages."

73% recommend the use of a flexible wrist. Comments concerning the flexible wrist were: "Is there any other?" "To some extent -- not completely." "But not flabby." "But most of the shifting is done with the elbow." Edwin Baker who did not recommend the flexible wrist said, "rubber-like, but not real flexible (more from elbow)."

71% prefer the wrist turned so the palm of the hand is up toward the face. Thomas Beversdorf wrote, "it depends on musical style, type of technique and extension of the slide."

87% recommend practicing slide patterns to develop a smooth slide technique. Edwin Baker and Glen Smith like the use of scales. John Christie does not use slide patterns except to work out "unusually difficult passages."

The majority of these experts like the use of the syllable "too" for tonguing in a staccato passage. The others recommended
were: ta (2), tah (2), tooth, dah, tut, duh, and one said it depends upon the register. "Doo" was preferred for legato tonguing. The others recommended were: loo, dah, roo, da, thoo, thu, and one did not use any syllable.

93% recommended holding a tone as long as possible and then making a very fast slide movement to the next tone. The one who did not recommend this style was George Roberts.

67% insist on the use of alternate positions to keep the slide moving in a continuous direction as much as possible. Many feel it depends upon the passage. Alternates should be used in fast passages where facility is most important and not in slow passages where quality of the tone is most important.

These experts do not always recommend playing D' in fourth position. Most of them believe the music being played should be the determining factor. John Christie says he plays about 95% in fourth position, because he thinks the intonation is better. He believes a student should be able to play a passage either way, and then decide which is best for himself.

62% said they do not allow the student to take his thumb off the cross-bar of the slide when playing. Most agree that it is permissible only when reaching for a long position. Paul Tanner wrote he "never had occasion to make an issue of this."

39% like the hand position with the slide being held by the thumb and the first two fingers with the wrist turned so the palm of the hand faces the player. The other two fingers are placed below the lower slide tube.
The majority of trombonists and teachers are in agreement on the main points of slide technique. The use of the wrist seems to be the most controversial issue. When the wrist is held with the palm of the hand facing the floor, a stiff wrist is used. When the wrist is held with the palm of the hand facing the player, a flexible wrist is recommended.

There is also some variation in the hand position. A few teachers like the position used by Clarke. See figure 1 below.
Most teachers seem to prefer the hand position similar to the one pictured in Young's Elementary Method. See figure 2 below.

Another position recommended by several teachers is the one shown in the Arban's Method. See figure 3 below.

Most of the teachers responding to the questionnaire favor the newer approaches to slide technique. However there is some disagreement on minor points. Generally they prefer:

1. Not stopping the slide when playing fast staccato passages.
2. Using a flexible wrist.
3. Keeping the palm of the hand facing the player.
4. Holding the tones as long as possible and then making a very fast slide movement in legato passages.
5. Keeping the thumb on the cross-bar when playing.
6. Using alternate positions in non-legato passages, when practical, to keep the slide moving in the same direction.

Based upon this study, the evidence would seem to recommend the teaching of the newer approach to slide technique. One only needs to watch a high school or, in many cases, a college trombone section to see why this is recommended. Often these students have incorrect body positions, hold the instrument improperly, and use the slide incorrectly. Most young trombone students play with a very jerky slide motion. This is generally due to two problems. Improper slide technique and having been taught by teachers who are not familiar with trombone slide technique. The large majority of college students and high school teachers have never had the opportunity to study the trombone with a trombonist. Rather, they have had to study with trumpet or French Horn teachers. Although they may be fine teachers, they do not play the trombone and are not, therefore, familiar with the problems and details of slide technique. This would seem to suggest a need for more trombone teachers on our college and university music faculties. The only way to improve slide technique is to start at the source of the problem. The future teacher must be taught correct slide technique. Without this training he will be unable to teach his students this important aspect of trombone playing. Only through improved teach-
ing will trombone slide technique improve.
BIBLIOGRAPHY


APPENDIX
THE QUESTIONNAIRE

I. GENERAL QUESTIONS

1. What levels have you taught? Elementary Jr. High Sr. High College Professional
2. Have you played professionally with a symphony orchestra? Yes No
3. Do you have students or former students playing:
   a. With a symphony orchestra? Yes No
   b. With a jazz or popular music group? Yes No
4. How many years have you been teaching? ________
5. Whom did you study with? ____________________________
6. What make of trombone do you use? Conn, Olds, King, Besson, Bach, Selmer, Reynolds, Getzen Other: ____________________________

II. SLIDE TECHNIQUE

1. Do you teach the no stop method for fast staccato playing? Yes No
2. Do you recommend a flexible wrist? Yes No
3. What wrist position do you recommend?
   a. Wrist parallel with the sides of the slide.
   or
   b. Wrist turned so palm of hand is up toward the face.
4. Do you recommend practicing slide patterns to develop a smooth slide technique? Yes No
5. In staccato playing, what type of tonguing do you use? Too Other: ____________________________
6. In legato playing do you hold the note as long as possible and then make a very fast slide movement to the next tone? Yes No
7. What type of tonguing do you use for legato playing? Too Doo Other: ____________________________
8. Do you insist on the use of alternate positions to keep the slide moving in a continuous direction as much as possible? Yes No
9. Do you ALWAYS insist on playing D' in the 4th position? Yes No
10. Do you let the student take his thumb off the bar when playing? Yes No
11. On the following page check the position you recommend, if any.
    Feel free to make any comments you wish.
CENTRAL WASHINGTON STATE COLLEGE
DEPARTMENT OF MUSIC

GRADUATE RECITAL

JAMES T. McDOWELL
TROMBONE

PATRICIA SMITH, piano

PROGRAM

CONCERTO FOR TROMBONE .................... Nicolai Rimsky-Korsakov
(1878) (1844-1908)

GRAVE FOR BASS TROMBONE ....................... Pierre-Petit
(1952) (1922- )

INTERMISSION

SONATA FOR TROMBONE AND PIANO .............. Paul Hindemith
(1941) (1895-1963)

SONATA FOR HORN, TRUMPET AND TROMBONE ........ Francis Poulenc
(1922) (1899- )

J. RICHARD JENSEN, French Horn
GARY EVANS, Trumpet

Reception following

Ushers courtesy of Sigma Mu

HERTZ RECITAL HALL
Sunday, May 19, 1968
4:00 P.M.