

EXTENDED TECHNIQUES IN STANLEY FRIEDMAN'S

SOLUS FOR UNACCOMPANIED TRUMPET

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This document examines the technical execution of extended techniques incorporated in the musical structure of *Solus*, and explores the benefits of introducing the work into the curriculum of a college level trumpet studio. Compositional style, form, technical accessibility, and pedagogical benefits are investigated in each of the four movements. An interview with the composer forms the foundation for the history of the composition as well as the genesis of some of the extended techniques and programmatic ideas.

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CHAPTER 1

INTRODUCTION

In the twentieth and early twenty-first centuries, numerous composers including Paul Hindemith, Kent Kennan, Eric Ewazen, Halsey Stevens, Alexander Arutunian, and Henri Tomasi have contributed notable works for trumpet. Their works require a high level of technical mastery and are written using standard western notational practices. However, since the late twentieth century it has become increasingly more common for composers to explore sounds and techniques that require unique, non-standard notational styles such as those featured in works by Luciano Berio, Peter Maxwell Davies, Gunther Schuller, Karlheinz Stockhausen, Pierre Boulez, Elliot Carter, George Crumb, and Stanley Friedman. *Solus*, a work for solo unaccompanied trumpet by Friedman, is an ideal example of the unconventional notation practices and performance expectations found in contemporary works for trumpet.

In addition to being recognized as an established composer of trumpet literature, Stanley Friedman (b. 1951) has written for the New Zealand Symphony Orchestra, the Memphis Symphony, L'Ensemble Intercontemporain, the Los Angeles Philharmonic Chamber Music Society, Luur Metalls, and the Canadian Brass. His compositions range from solo instrumental works to grand scale operas. Friedman earned his Doctor of Musical Arts in composition from the Eastman School of Music where he studied with Samuel Adler,¹ and he performed as a trumpeter with the Israel Philharmonic, Los Angeles Philharmonic, New Zealand Symphony, and Hong Kong Philharmonic. Currently active as a teacher and clinician in trumpet pedagogy, Friedman also continues to compose by commission.² He is a four-time winner of the International Trumpet Guild composition prize. Friedman's achievements as composer,

¹ Stanley Friedman, *Solus*, notes on back cover. (Vuarmarens: Editions BIM, 1978).

² Ibid.

performer, and pedagogue have earned him respect and recognition from both trumpet performers and teachers as an important musical figure of the twenty-first century.

Solus was written during Stanley Friedman's time as a graduate student at the Eastman School, and it was the second place winner of the 1976 International Trumpet Guild composition contest.³ In my recent interview with the composer, he revealed that he began the work as a response to the "avant-garde" movement in the mid-1970s. He cited composers Luciano Berio, Joseph Schwantner, and George Crumb as compositional influences and stated that seeing what his trombone acquaintances were doing with their instruments gave him ideas for some of the extended techniques in *Solus*. He explained that the overall idea was to incorporate extended technique and theatrics yet maintain a high level of musical structure. He further explained that the work is a parody of trumpet recitalists and avant-garde composers who take themselves too seriously.⁴ When asked about the open tube technique in the fourth movement, he recalled that he was cleaning his trumpet one day and forgot to replace the third valve slide before beginning to play. He discovered that he was able to produce a limited number of pitches and developed the idea into one of the most innovative techniques to be used in contemporary trumpet literature.⁵

It is discouraging for trumpet players to encounter these extended techniques in contemporary literature and not understand how to interpret or execute the gestures. The purpose of this project is to promote *Solus* as a valuable, accessible work of unaccompanied trumpet literature and to establish a foundation for teaching and performing the work through formal analysis and pedagogical study of the extended techniques. Studying *Solus* will help the young or inexperienced player not only gain the technique and motor skills required to accurately execute

³ Edward Stanley Bach, "A Performance Project on Selected Works of Five Contemporary Composers: Macoln Arnold, Robert Henderson, Stan Friedman, John Elmsley, Lucia Dlugoszweski" (D.M.A. diss., University of British Columbia, 1991), 33.

⁴ Stanley Friedman, interview by author, transcript, Greeley, Colorado, 6 February 2008.

⁵ Ibid.

these gestures but also achieve musical understanding of those techniques within the context of a musical work. As an added benefit, all of the techniques examined in *Solus* are directly related to traditional trumpet playing and musicianship in general. Chapter 3 will more closely examine how the accurate performance of these extended techniques correlates to improvement of basic trumpet skills.

CHAPTER 2

DISCUSSION OF *SOLUS*

Programmatic Elements

The term *Solus* refers to a theatrical stage direction meaning alone or by oneself. *Solus* For Unaccompanied Trumpet is composed in four movements and programmatic in nature. Friedman described the first movement as very stoic, almost as if the composer is taking himself too seriously.¹ He goes on to say that this movement is an attempt to be overly academic and cerebral.

The second movement is subtitled “Furtively”, defined as “being done with stealth or secretively or obtained underhandedly; stolen.”² Friedman describes this movement as a less serious answer to the first. There are many more theatrical and comedic elements in this movement. The theatrical quality is emphasized through the use of a Harmon mute (stem in) for the entire movement. The Harmon mute creates a soft sound, and coupled with slide technique and pedal tones there is a sly and sneaky element. In addition, the hand muting, over-use of the slide technique, and aleatoric rhythmic figures emphasize the comedic nature.³

Friedman explains that the third movement’s programmatic elements portray a cornet soloist who has completely lost his mind.⁴ This explanation emphasizes the strong comedic and theatrical elements heard throughout the entire work.

The final movement, “Fanfare”, is in contrast to the first three in that it is not composed using twelve-tone technique. Friedman states that this movement is the rebirth of the absurdity

¹ Friedman, 6 February 2008.

² “Furtively.” *Merriam-Webster Online Dictionary*. 2008. <http://www.merriam-webster.com> (1 February 2008).

³ Friedman, 6 February 2008.

⁴ *Ibid.*

from the previous three movements.⁵ This movement is the culmination of what has come before it in both extended technique and programmatic feature. “Fanfare” can be performed by itself and functions successfully as a stand-alone work.

Movement I. “Introduction”

Form

The first movement of *Solus* consists of three sections, each based on the twelve-tone compositional technique developed by Arnold Schoenberg in the early 1920s. There is a brief pre-introduction comprised of the first four notes of the prime row. The same material is then repeated and the prime row completed with a slight change in rhythm. The tone row is stated twice in the A section, at measure two in prime (P0) and again in measure five in retrograde inversion (RI1). Section A cadences on a rapid and chaotic statement of RI9 at measure 11. Section B begins with a solemn statement of the opening theme transposed down a fifth (P4). The rest of the B section includes statements of P2 at measure 16, I5 at measure 19, P9 at measure 22 and concludes with R2 minus the final F# in measure 29. Section C is the shortest of the three sections yet the most angular and busy. The section begins with a statement of P5 followed by I2 and finally R0. The final statement beginning in measure 38 is an exact retrograde of the opening theme and acts well as a closing statement of section A. The tone row matrix can be seen in Table 1.⁶

⁵ Ibid.

⁶ Michael Craig Bellinger. “A Model for Evaluation of Selected Compositions for Unaccompanied Trumpet According to Criteria of Serious Artistic Merit” (D.M.A. diss., Louisiana State University and Agriculture and Mechanical College, 2002), 132.

Table 1. Tone Row Matrix in *Solus*, mvt. I. “Introduction”

	I0	I1	I2	I3	I4	I5	I6	I7	I8	I9	I10	I11	
P0	A	Db	C	F	E	F#	G#	G	Eb	D	Bb	B	R0
P1	F	A	G#	Db	C	D	E	Eb	B	Bb	F#	G	R1
P2	F#	Bb	A	D	Db	Eb	F	E	C	B	G	G#	R2
P3	C#	F	E	A	G#	Bb	C	B	G	F#	D	Eb	R3
P4	D	F#	F	Bb	A	B	Db	C	G#	G	Eb	E	R4
P5	C	E	Eb	G#	G	A	B	Bb	F#	F#	Db	D	R5
P6	Bb	D	Db	F#	F	G	A	G#	E	Eb	B	C	R6
P7	B	Eb	D	G	F#	G#	Bb	A	F	E	C	Db	R7
P8	Eb	G	F#	B	Bb	C	D	Db	A	G#	E	F	R8
P9	E	G#	G	C	B	Db	Eb	D	Bb	A	F	F#	R9
P10	G#	C	B	E	Eb	F	G	F#	D	Db	A	Bb	R10
P11	G	B	Bb	Eb	D	E	F#	F	Db	C	G#	A	R11
	RI0	RI1	RI2	RI3	RI4	RI5	RI6	RI7	RI8	RI9	RI10	RI11	

Extended Techniques

The first movement of *Solus* includes four types of extended techniques:

1. Trills
2. Slide technique
3. *Tremolo*
4. Flutter tonguing

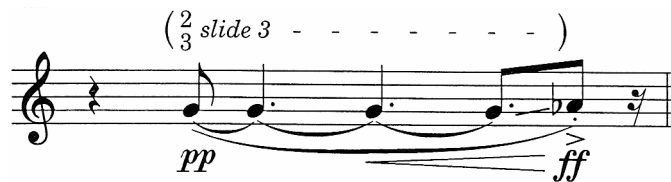
The first instances of these techniques are trills in measures 5, 6, 15, 16, 17, and 37. The trill is indicated with the letters *tr* and a wavy line above the note (Example 1).



Example 1. *Solus* Movement I. “Introduction”, measure 5. Excerpts of Stanley Friedman *Solus for trumpet alone* (BIM TP 114) © 1978 by Editions Bim/ The Brass Press, Switzerland (www.editions-bim.com). Used with permission.

Because of the notation and function of the trills in *Solus* (playing the trill with very rapid notes and extreme volume changes) I consider the trills an extended technique. The trills in the first movement should be played in such a way that they create their own small episode and should clearly stand out of the musical texture. To achieve this effect an exaggeration of dynamics and speed are required in the execution of the trills.

The second extended technique is slide technique. The first example is in measure 18 where the trumpet makes a smooth *glissando* between two notes a semitone apart. This sound is not idiomatic to the trumpet and thus the player must use non-traditional ways of producing the effect. At measure 18 a long *g*´ slides up to a punctuating *a-flat*´ (Example 2).



Example 2. *Solus* Movement I. “Introduction”, measure 18.

Friedman instructs the performer to play the *g*´ (an open note on the C trumpet) with the second and third valve depressed. (In order to produce the correct pitch of *g*´ an adjustment must be made with the third valve slide as the two-three valve combination produces an *a-flat*´). The

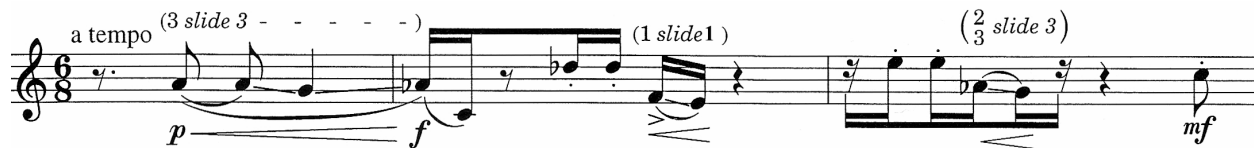
slide must be thrown to its full length while increasing volume, and then quickly drawn in to punctuate the effect ending on the a-flat´.

In measures 20, 21, and 22 again the slide technique is featured (Example 3).



Example 3. *Solus* Movement I. “Introduction”, measures 20-22.

Each time there is a different harmonic function of the effect and different valve combinations are used. In measure 20, instructions are given to use the alternate valve combination for a´ which is the third valve alone. This valve combination makes it possible to create a slide down to g´ and back up to a-flat´ without changing fingerings. The slide must not be returned all the way in order to achieve the a-flat´. This technique takes a bit of practice with a tuner to find where the note lies while using these alternate fingerings. In measure 21, Friedman asks for the player to slide from f´ to e´ using the instructions (1 *slide* 3). This instruction is an obvious misprint as it is physically impossible to start a pitch with the first valve depressed and finish that same note with the third valve depressed. The result of the printed directions is a simple slur, whereas if the first valve is depressed (sounding an f´) and the first valve slide gradually extended (notated 1 *slide* 1) the result is a slide between f´ and e´. See example with corrected directions in measure 21 (Example 4).



Example 4. *Solus* Movement I. “Introduction”, measures 21-23. (corrected)

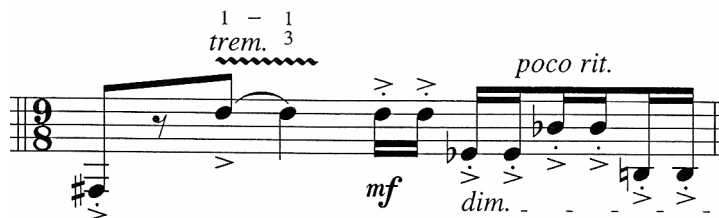
This technique is also used to close section B in measure 29 (Example 5).



Example 5. *Solus* Movement I. “Introduction”, measure 28-29.

The challenge here is that the a'' is difficult to hear when using the 1-2-3 valve combination with the third slide extended. Many of the instances of slide technique in this movement require a long tone using abnormal slide lengths. Accuracy of pitch is imperative for performers attempting to create the true effect that Friedman intended.

The last two techniques featured in this movement are *tremolo* and flutter tonguing. *Tremolo* on the trumpet is similar to the trill. Whereas the trill on a trumpet is the rapid change from one pitch to another pitch using of valves or ‘lip slurs’, the *tremolo* is the rapid change of the same pitch with the use of different valve combinations. In measure 19, the *tremolo* on d'' is created by alternating a normal first valve fingering with the alternate first and third valve combination (Example 6).

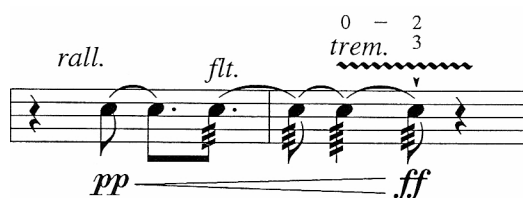


Example 6. *Solus* Movement I. “Introduction”, measure 19.

Flutter tonguing is used briefly in two places (measures 25 and 45). The use of flutter tonguing and *tremolo* in such close proximity to each other exaggerates the unique sounds each technique produces (Example 7a, 7b).



Example 7a. *Solus* Movement I. “Introduction”, measure 24-5.



Example 7b. *Solus* Movement I. “Introduction”, measures 44-5.

According to Roger Sherman in *The Trumpeter’s Handbook: A Comprehensive Guide to Playing and Teaching the Trumpet*, flutter tonguing uses the same technique a singer uses to roll the syllable *r*. The back of the tongue stays high and the front or tip of the tongue stays relaxed.

As the air moves across the tongue, the front or tip is allowed to ‘flap’ or move rapidly.⁷ As a side note, many professional trumpeters find it hard or impossible to flutter tongue. It is therefore imperative that the performer find a reasonable solution that will achieve the desired effect. I have had success using the “growl” technique, which is aurally similar to flutter tonguing but produced in a physically different manner. With a “growl,” the front of the tongue stays low to the jaw while the back of the tongue or uvula (little piece of tissue that dangles from the back of the throat) is relaxed and allowed to vibrate.

Movement II. “Furtively”

Form

The second movement is also serial. The movement is presented in a ternary ABA’ form with no bar lines. Rests are indicated as moments of silence with durations of two to four seconds. Section A is comprised of lines one through seven, section B is the end of lines seven through 11, and the final A section (A’) is lines 12 through 15. The matrix for “Furtively” can be seen in Table 2.⁸

Table 2. Tone Row Matrix for *Solus*, mvt.II “Furtively”

	I0	I1	I2	I3	I4	I5	I6	I7	I8	I9	I10	I11	
P0	A	Bb	Gb	F	Db	C	D	E	Eb	Ab	G	B	R0
P1	Ab	A	F	E	C	B	Db	Eb	D	G	Gb	Bb	R1
P2	C	Db	A	Ab	E	Eb	F	G	Gb	B	Bb	D	R2
	RI0	RI1	RI2	RI3	RI4	RI5	RI6	RI7	RI8	RI9	RI10	RI11	

⁷ Roger Sherman, *The Trumpeter’s Handbook* (Athens, Ohio: Accura Music, 1979), 88.

⁸ Bellinger, *A Model of Evaluation*, 139.

Table 2—Continued.

	I0	I1	I2	I3	I4	I5	I6	I7	I8	I9	I10	I11	
P3	Db	D	Bb	A	F	E	Gb	Ab	G	C	B	Eb	R3
P4	F	Gb	D	Db	A	Ab	Bb	C	B	E	Eb	G	R4
P5	Gb	G	Eb	D	Bb	A	B	Db	C	F	E	Ab	R5
P6	E	F	Db	C	Ab	G	A	B	Bb	Eb	D	Gb	R6
P7	D	Eb	B	Bb	Gb	F	G	A	Ab	Db	C	E	R7
P8	Eb	E	C	B	G	Gb	Ab	Bb	A	D	Db	F	R8
P9	Bb	B	G	Gb	D	Db	Eb	F	E	A	Ab	C	R9
P10	B	C	Ab	G	Eb	D	E	Gb	F	Bb	A	Db	R10
P11	G	Ab	E	Eb	B	Bb	C	D	Db	Gb	F	A	R11
	RI0	RI1	RI2	RI3	RI4	RI5	RI6	RI7	RI8	RI9	RI10	RI11	

Sections A and A' each begin with a clear six note motive while the B section uses a derivative of this motive in a repeating pattern. The B section repeats the six note motive three times with interjections of extended techniques used in the first movement (Example 8a, 8b, 8c).

Senza misura, rubato (♩ = 50)
 Harmon mute (stem in)

p *mf*

Example 8a. *Solus* Movement II. “Furtively”, line 1.

($\frac{1}{3}$ slide 3 - - - -) 6
p
gradually draw slide in

Example 8b. *Solus* Movement II. “Furtively”, line 7.

1-slide 1 *f*
 $\frac{1}{3}$ slide 3
 6
 (slide 1 - - - -) *ff* 3
 3-slide 3 3-slide 3 3-slide 3
 3
 0

Example 8c. *Solus* Movement II. “Furtively”, lines 8-11.

Extended Techniques

There are four types of extended technique in the second movement not previously discussed in the first movement.

1. Harmon mute (stem in) in conjunction with hand muting
2. Rhythmic duration (Feathered beaming)
3. Pedal tones

4. Quartertones

The first technique employed is the hand muting with a Harmon mute. This gesture occurs at the beginning of the A and C sections (Example 8a). With the mute in the bell, the player must gradually close his/her hand over the end of the stem and suddenly open the hand to create the “WA!” sound indicated by a wedge over the tied c' . The sound created with the mute is softer and condensed as it travels through the mute. Later, there is an instance at the end of line 13 where the player is to produce the “WA!” sound by itself with no initial closing of the hand, only a quick close-to-open motion. This sound effect adds to the drama and theatrical nature by invoking a sneaky or spy-like programmatic feature, often heard in motion picture or television soundtracks.

The second technique used is rhythmic duration, or “Feathered beaming” (Example 9).

The image shows two staves of musical notation. The first staff is in treble clef with a 3/4 time signature. It starts with a 3-measure rest, followed by a series of quarter notes with a 'cresc.' marking. A '3 slide 3' marking is placed above the notes. The second staff continues with a 'draw out third slide' marking, followed by a 3-measure rest, a 4-measure rest, and a 'pp' dynamic marking.

Example 9. *Solus* Movement II. “Furtively”, lines 2-3.

This compositional technique is common in modern notation. The indication directs the performer to change tempo from slow to fast or fast to slow depending on which direction the feathering is displayed. For example, in Example 9 the repeated e' gradually speeds up, increases

in volume, then gradually changes to e-flat´ by pulling out the third valve slide before slowing in tempo and dropping in dynamic level.

Pedal tones are used sparingly but effectively in this movement (a trumpet pedal tone is any note below F-sharp.). The pedal B-flat at the start of line six is marked *piano*, and the uncommon low range and soft volume dramatizes the “furtive” character. Friedman also uses pedal tones at the conclusion of the second section in line 10. The composer gives fingering suggestions, but it is ultimately up to the performer to execute the passage, and thus whatever fingering accomplishes this effect is acceptable.

The last technique introduced in this movement is the use of quartertones. Friedman indicates this technique with a flat sign and the number 4 separated by a forward slash (see Example 9). The musical gesture is further complicated by the use of slide technique. Here the player must use the first or third valve slide to adjust the pitch in a gradual downward slide along with a notated *accelerando* and *ritardando* (see Example 9).

This movement features one of the more difficult passages of the entire work in lines 7 through 11 (see Example 8c). A close examination of the second, third, and fourth groupings in line eight is necessary to fully understand what the composer intended. The a´ in the second group sounds a quarter-step flat as a result of the first valve slide being pulled all the way out. This effect is indicated with the quartertone sign above the four-note group, meaning that the first three notes are sounded down a quartertone while the last note e´´ is fingered open. The challenge is that once the first slide is extended it is quite difficult to extend the third slide its full length to produce the e´´ when playing at a rapid tempo. The soloist is required to execute feathered beaming and a combination of *tremolo*, slide technique, and flutter tonguing near the

end of the gesture in line ten. The movement concludes with a brief recap of the material from the first section, incorporating many of the same extended techniques.

Movement III. “Scherzando and Waltz”

Form

The third movement is composed in ABA form, with the A sections as the *Scherzando* and the middle B section as the *Waltz*. Friedman again uses twelve-tone technique to generate pitches. The tone row layout of this movement seems random and often does not include a complete row. There are times when only segments of a row are presented as well as instances of repetition. This instance is what Friedman refers to as “artificial gravity” or “moments of temporary pseudo-tonality.”⁹

The composer discusses the role of the tone row in *Solus* in a written correspondence with Michael Craig Bellinger:

The pitch material in the entire third movement is derived from the 12-pitch row from the first movement. The row permeates the whole piece, in fact. That’s part of the underlying psychological/theatrical/symbolic structure of the composition. The row is fairly strictly employed in the first movement, treated more whimsically in the second, gradually broken down in the third and reborn transfigured and fragmented in the fourth. Sometimes it’s a bit of a stretch to find the row. But it’s there. It’s not a “classical”, Schoenbergian treatment of the row. I repeat motives and small groups of notes to create “artificial gravity,” moments of temporary pseudo-tonality. In my compositions in general I often blur the so-called boundaries between tonality and atonality, as befits the intended emotional impact of the musical gesture. There are some “images” (for lack of a better term) that I only can express tonally, others I can only express atonally. Many of my works are based on pitch systems which offer both tonal and atonal possibilities. *Solus* was an early exploration of this concept.¹⁰

Table 3 shows the matrix of the third movement.

⁹ Ibid, 143.

¹⁰ Bellinger, *A Model of Evaluation*, 143-144.

Table 3. Tone Row Matrix for *Solus*, mvt. III “Scherzando and Waltz”

	I0	I1	I2	I3	I4	I5	I6	I7	I8	I9	I10	I11	
P0	G	G#	E	D#	B	Bb	C	D	C#	F#	F	A	R0
P1	F#	G	D#	D	A#	A	B	C#	C	F	E	G#	R1
P2	A#	B	G	F#	D	C#	D#	F	E	A	G#	C	R2
P3	B	C	G#	G	D#	D	E	F#	F	A#	A	C#	R3
P4	D#	E	C	B	G	F#	G#	A#	A	D	C#	F	R4
P5	E	F	C#	C	G#	G	A	B	A#	D#	D	F#	R5
P6	D	D#	B	A#	F#	F	G	A	G#	C#	C	E	R6
P7	C	C#	A	G#	E	D#	F	G	F#	B	A#	D	R7
P8	C#	D	A#	A	F	E	F#	G#	G	C	B	D#	R8
P9	G#	A	F	E	C	B	C#	D#	D	G	F#	A#	R9
P10	A	A#	F#	F	C#	C	D	E	D#	G#	G	B	R10
P11	F	F#	D	C#	A	G#	A#	C	B	E	D#	G	R11
	RI0	RI1	RI2	RI3	RI4	RI5	RI6	RI7	RI8	RI9	RI10	RI11	

Rhythmic precision is the key to the *Scherzando*. The rhythms in the second and fifth measures must be interpreted accurately to reveal the lightheartedness of the *Scherzando*. In measure two, the last two notes are placed on beats three and five, creating the rhythmic feel of a lazy waltz; in measure five, the last note is placed a sixteenth beat early as if to make up for the laziness of the earlier statement (Example 10).

Allegretto, lightly ♩ = 112
st. mute

The musical score consists of two systems. The first system contains measures 1 through 5. It begins in 3/8 time with a melodic line of eighth notes. The tempo is marked 'Allegretto, lightly' with a quarter note equal to 112 beats per minute. The instruction 'st. mute' is placed above the staff. The key signature has one sharp (F#). The second system contains measures 6 and 7, which are in 5/8 time and continue the melodic line with eighth notes.

Example 10. *Solus* Movement III. “Scherzando and Waltz”, measures 1-5.

The *Waltz* is in stark contrast to all material that occurs before and after in this movement. Friedman highlights this contrast by giving specific performance instructions at the *Waltz*’s opening—“exaggerated and theatrical.” This task is achieved by playing with *rubato*, excessive vibrato, and *portamento*. The *Waltz* ends with a rather “exuberant display of insanity,” in the composer’s own words.¹¹ Measure 72 contains three notes that begin an improvisational event that includes interjected verbal ‘screams’ from the player. After only seven measures, the return of the *Scherzando* is shrugged off with the brazen gesture of a shake technique and a final fragmented statement of the opening material.

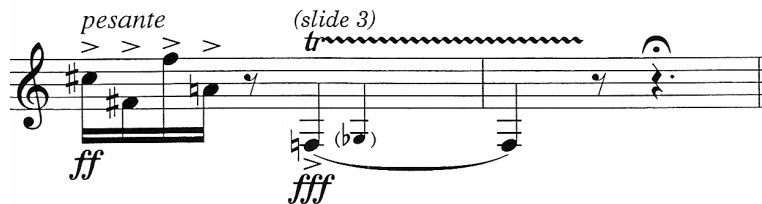
Extended Techniques

There are two types of extended technique featured in this movement.

1. Trill with slide technique
2. Shake

¹¹ Friedman, 6 February 2008

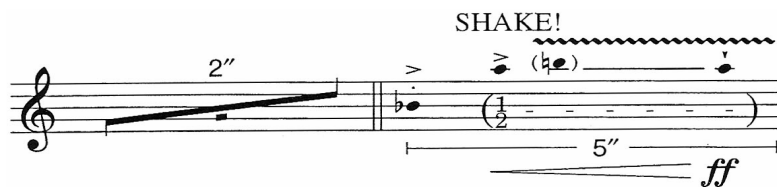
The trill and slide techniques have been discussed in previous movements and here they appear in combination with each other. In measure 26, Friedman notates a low F-natural to low G-flat trill (Example 11).



Example 11. *Solus* Movement III. “Scherzando and Waltz”, measures 26-7.

On a conventional C trumpet, this note will not sound unless produced as a pedal tone. As in previous movements the composer directs the performer to slide the third valve slide all the way out. With the slide extended, the low f-natural is possible as a real tone rather than a pedal tone and the performer is able to create the trill with the indicated dynamic of triple *forte*. To execute this technique the player will need to use false fingerings for the written pitches, 1-2-3 for the low f and 1-3 for the low g-flat.

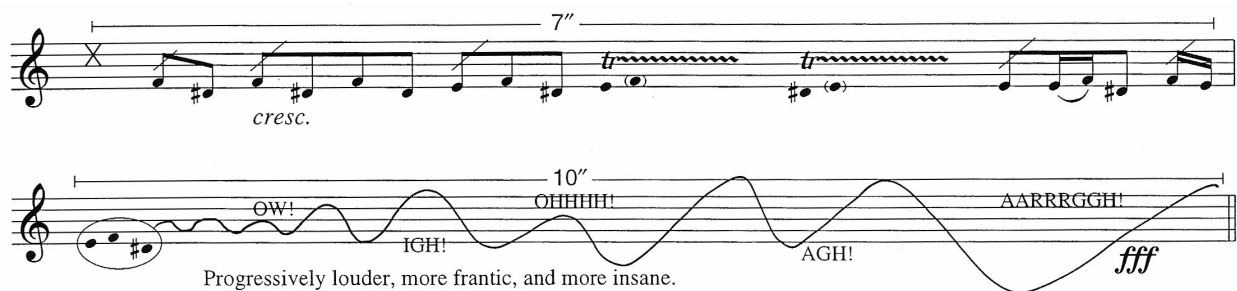
The shake is indicated in measure 82 (Example 12).



Example 12. *Solus* Movement III. “Scherzando and Waltz”, measure 82.

Here Friedman uses a non-standard notation of pitches without stems and a given duration of five seconds to play the gesture. He indicates that the shake should be played by using the fingering of first and second valves depressed for both notes. Here the shake is not produced by physically moving the instrument, as is often the case with jazz gestures, but with a lip trill. The lip trill is achieved by rapidly playing two different notes with the same fingering, here a'' and b''.

In the final section of the *Waltz* (measures 71-72), Friedman uses non-traditional notation with the instruction “Progressively louder, more frantic, and more insane.”¹² Along with this direction, the musical notation of measure 71 is seven seconds of improvised grace notes marked with a slash through the first note of each group. The second measure includes notes with no stems inside a circle (or cell) with a “wavy” line that begins narrow and becomes wider at the end of the measure. Within this figure five vocalizations are indicated: “OW! IGH! OHHH! AGH! AARRRGGH!” (Example 13)



Example 13. *Solus* Movement III. “Scherzando and Waltz”, measures 71-2.

The note groups in measure 71 should be played one time each and as fast as possible.¹³ In measure 72, the cell indicates the starting pitches of the improvised section while the wavy

¹² Stanley Friedman, *Solus*

¹³ Howard Risatti, *New Music Vocabulary* (Urbana: University of Illinois Press, 1975), 32.

line indicates the general direction of the improvised melody. At various instances the player vocalizes the indicated expressions between frantic and outlandish outbursts of sound. It is important to note that the trumpet is not making any sound at the same time as the vocal interjections.¹⁴ The most important element of this movement is the theatrical—if the rhythmic patterns of the *Scherzando*, over-the-top craziness of the end of the *Waltz*, and sardonic nature of the last *Scherzando* are convincingly executed, the theatrical element will be realized.

Movement IV. “Fanfare”

Form

“Fanfare” is in ABA form with a short coda. It does not use tone rows—instead, Friedman uses a simple tonal center of B-flat. The use of intervals, specifically a descending perfect fifth and ascending perfect fourth, comprise much of the melodic content of this movement.¹⁵

Section A (lines one through nine) uses the pitches f^{''}, b-flat['], c^{''}, and e^{''} exclusively with the exception of one b^{''} in line seven. The entirety of this section is performed with false fingerings. Section B (lines 10-15) contains the same notes with the addition of a['], g, g-sharp['], f-sharp, and c-sharp^{''} through the use of slide technique. A brief recap of the opening fanfare comprises the third section and a final lyric phrase, reminiscent of the opening material from the first movement, closes the entire work.

¹⁴ Friedman, 6 February 2008

¹⁵ Bellinger, *A Model for Evaluation*, 151-152.

Extended Techniques

The fourth movement “Fanfare” features all the extended techniques in the previous movement and adds one other—open tube technique, or “false tones.”¹⁶ Friedman indicates that the second valve slide is to be removed for the entire movement. He specifies valve combinations to achieve the written pitches (Example 14).

Freely ♩ = 69

ppp/mp

[Remove 2nd valve slide for entire movement]

pp/mf

N

N

Example 14. *Solus* Movement IV. “Fanfare”, lines 1-2.

Whenever false tones are used there are two dynamics indicated. In Example 14, the passage is marked *PPP/mp*. The performer plays the written f'' with the second valve depressed at a *mezzo piano* dynamic. The tone is produced through the open second valve rather than the bell, resulting in a much softer *pianissimo*. Corresponding dynamics follow suit in relation to the degree of the marked dynamic. In line three, slide technique is needed in connection with open tube technique to produce the written E (Example 15).

¹⁶ Friedman, *Solus*.



Example 15. *Solus* Movement IV. “Fanfare”, line 3.

Normally the valve combination 2-3 with the second slide removed produces f'' , but when the third slide is extended the pitch is lowered to e'' . The slide must be returned to its “in” position in order to produce the written c'' and f'' . Line 4 presents a challenge as the slide must be extended for the 2-3 combination e'' then pulled in for the sounding c'' . In order to produce the correct pitches the third valve slide must move in conjunction with the lip trill (Example 15).

Line nine contains the transition from the A section to the B section. Friedman incorporates feathered beaming, single, double, doodle, and flutter tonguing to create a truly unique sound. The entire transition is played on a written b-flat but with a continuously changing timbre. It begins very softly with open tube technique, gradually becomes louder, and at rehearsal letter A the first valve is pressed as the second valve is released. This creates a dramatic and surprising dynamic change. This gesture is further enhanced with various articulations that gradually accelerate (Example 16).

Example 16. *Solus* Movement IV. “Fanfare”, lines 9-10.

The open tube technique is used to its maximum effect in line 13. Quickly changing from first to second valve (thus changing from real tone to false tone) creates the impression of two different instruments or a quick mute change that would ordinarily be impossible given the tempo and rhythmic considerations of the passage. Friedman includes the use of slide technique in this segment to imitate the sound of a trombone *glissando* (Example 17).

Example 17. *Solus* Movement IV. “Fanfare”, lines 13-14.

A brief recap of the material from the opening of the movement precedes the coda. The written pitches in the coda cannot be produced with normal valve combinations while the second

valve slide is removed, so alternate fingerings and slide technique are needed. One final outburst occurs in the last half of line 18 (a *tremolo* and slow *glissando* down to a pedal B-flat). The *tremolo* is produced by trilling from the B-flat to low F. The final pitch heard is a pedal B-flat, which fades to nothing.

CHAPTER 3

PEDAGOGICAL FUNCTION OF *SOLUS*

Musical Considerations

Solus presents a myriad of opportunities to express oneself musically and artistically. The work incorporates flowing lyricism as well as extreme virtuosity. There are moments of comedy and theatrics; there are moments of despair and insanity. The fifteen minute work includes an astounding amount of musical content, but perhaps the most striking feature is the use of non-traditional or extended techniques. Stanley Friedman stated that he came up with many of the techniques spontaneously as he was cleaning his trumpet, trying to mimic a trombone, or creating a compositional response to Berio's *Sequenza V*. There is little helpful source material that would help explain or discuss the extended techniques in *Solus*. There are numerous books, etudes, and sets of instructions that address extended techniques, but most are outdated and many contemporary works that include new, unique extended techniques are not discussed in those resources. When Friedman was asked to explain a confusing measure that included more than one extended technique, he himself offered two different fingering suggestions to successfully execute the passage.¹ This insight from the composer highlights the lack of standardization and potential confusion for performers and teachers who deal with new works incorporating extended techniques. It also shows the need for regularly updated performance manuals that deal specifically with newer compositions using non-standard notational practices.

This chapter also analyzes a variety of the extended techniques found in *Solus* and addresses not only their application to *Solus* but to everyday trumpet performance. Of course, one frequently asked question is, can a player gain any value from practicing and mastering these

¹ Friedman, 6 February 2008.

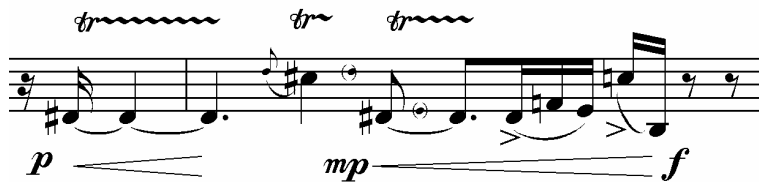
relatively rare devices? (After all, how many classical trumpet concerti require the player to scream at the audience?) Regardless of one's performance level or genre of study, it is important to gain knowledge of uncommon and unusual ways to produce sounds on the trumpet. Vincent Persichetti uses slide technique in his *Parable for Solo Trumpet*, and Peter Schickel has used extended techniques in his compositions with great success as has John Corigliano in his large-scale orchestral works. What is the player to do when confronted with a work by one of these composers?

In addition this chapter is intended to assist the student and/or teacher in the exploration of this work. Along with the understanding of new notation and extended techniques the student and teacher will hopefully gain an appreciation for new music. Often a performer will shy away from a new piece of music when confronted with unusual notational devices or a non-traditional compositional format, choosing instead to stick with familiar pursuits. While studying older, traditional works is worthwhile and enjoyable for trumpet players, it is unfortunate that many have chosen to disregard a large body of quality "new" literature simply based upon a fear of the unknown.

Another important reason to study *Solus* is that all of the extended techniques can be used to strengthen many aspects of trumpet playing. The following discussion outlines what a studio teacher can accomplish by introducing this piece to younger players and will look at each technique individually, examining it from the perspective of both teacher and student. It is important to emphasize that a student must have a certain level of technical mastery before attempting the study of *Solus*. Prerequisite skills include: range encompassing A to d', multiple tonguing, and advanced aural abilities. Typically, this skill set is manifest in undergraduate and graduate level trumpet students, and occasionally in extremely advanced high school students.

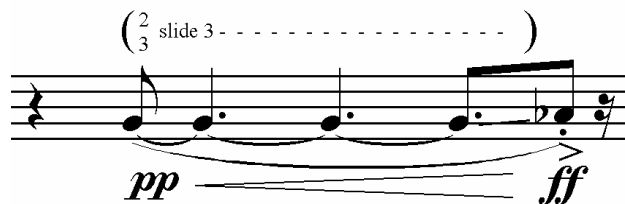
Technical Considerations

Trill: The teacher will find that if the student works diligently on trills, finger dexterity will increase. Within *Solus*, trills must often also form a musical phrase unto themselves. Often the student will approach a trill with very little musical direction—in *Solus*, trills in a variety of finger patterns and ranges provide the student an opportunity to practice creating complete musical gestures. Mastering trills with correct shape and phrasing will assist the performer with other standard trumpet works such as those by Franz Joseph Haydn and Johann Nepomuk Hummel. The student can gain confidence from playing a difficult modern work while improving a skill that s/he will use in many other aspects of trumpet playing (Example 18).



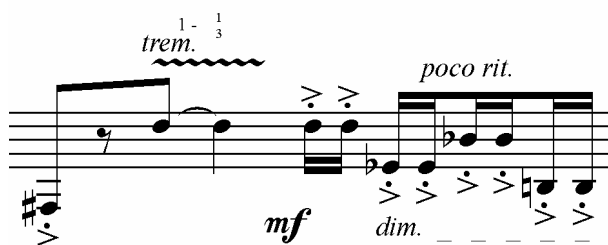
Example 18. *Solus* Movement I. “Introduction”, measures 16-17.

Slide Technique: Slide technique is a device that Friedman developed to imitate a trombone’s *glissando*. In reality, the technique is extremely useful for developing one of the most fundamental skills necessary for a musician: adjusting intonation. Students will gain substantial experience in this skill when practicing *Solus* and will hone their ability to hear a note before they play it. Students will also learn to effectively use their tuning slides, which will assist their day-to-day intonation studies and performance (Example 19).



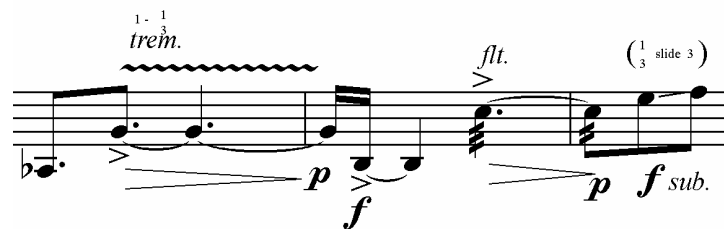
Example 19. *Solus* Movement I. “Introduction”, measure 18.

Tremolo: The *tremolo* is a technique that is becoming more widely used in classical music; however, its most prolific usage for trumpet is in the jazz idiom. The effect is produced by alternating two different valve combinations to create a rapid change in perceived articulation of the same note. It is critical that the airflow stay consistent through the *tremolo* in order for both valve combinations to result in the same pitch. Consistent airflow is an important concept in all aspects of brass playing, so by practicing this technique the student reinforces this idea or ideal. It is easy to overlook a technique such as *tremolo* as a pedagogical tool, but the physical requirements for its proper execution are rooted in the most basic concept of brass pedagogy—proper management of the breath (Example 20).



Example 20. *Solus* Movement I. “Introduction”, measure 19.

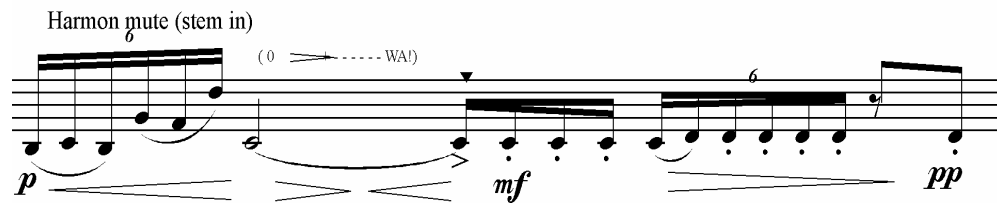
Flutter tonguing: Flutter tonguing is a very common technique and is used extensively in the jazz idiom. It is becoming more common in classical music as well—Eugene Bozza uses this technique in his *Rustiques* and Leonard Bernstein features it in the trumpet parts to the “Symphonic Dances” from *West Side Story*. The striking fact about flutter tonguing is that many fine professional players simply cannot physically do it—which should encourage (rather than discourage) young students to develop the technique early in their trumpet studies. Since flutter tonguing has become a more common compositional staple in trumpet works, all performers should consider it a necessary skill—the frequency with which the technique is called for in *Solus* provides ample opportunities for practice (Example 21).



Example 21. *Solus* Movement I. “Introduction”, measures 24-26.

Harmon mute: Harmon mute usage in *Solus* advances the key performance concepts of intonation and mute techniques. Placing a Harmon mute in an instrument causes the pitch center to rise, requiring aural and physical adjustments in order to perform the passage accurately. Developing the hand-stopping mute technique is helpful because the technique is used in many jazz and pop music settings. The technique of hand-stopping a Harmon mute is hardly addressed in applied trumpet lessons. The use of the Harmon mute in *Solus* offers the opportunity for the

student to acquire a skill that is becoming more common in classical performance situations (Example 22).

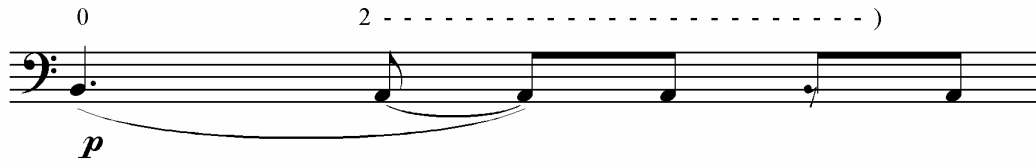


Example 22. *Solus* Movement II. “Furtively” line 1.

Feathered beaming: Practicing changes in rhythmic duration is useful in preparing for any instance of *rubato* or in dealing with cadenza-like passages. The material presented in *Solus* requires the performer to make personal interpretive rhythmic decisions in regards to speed and tempo. This gesture is not unlike cadenza material in turn-of-the-century cornet solos where the composer implies the shape of a phrase by the appearance of the notation. Friedman uses the same techniques, with the same pitches speeding toward an apex then gradually slowing (see Example 22).

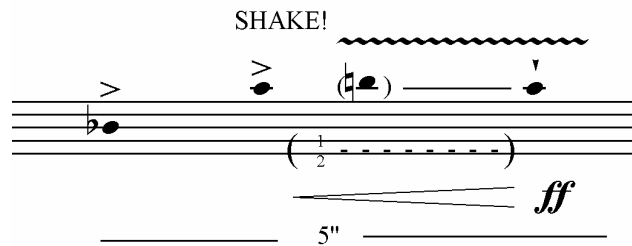
Pedal tones: The benefits of working on pedal tone range are substantial. There are several aspects of brass pedagogy that pedal tones encompass. First, there is the aural aspect; a player must hear the note internally before s/he can execute the pitch on the instrument. With proper education and diligent practice this technique will pay off greatly in terms of the performer’s pitch center and strength of embouchure. The second benefit of practicing pedal tones is upper register conditioning. When playing in the pedal register the aural cavity is emulating what happens during upper register playing. The student is able to efficiently use air

flow and low mouth piece pressure in a manner that effectively builds range while staying true to proper tone production habits (Example 23).



Example 23. *Solus* Movement II. “Furtively”, line 7.

Shake: The shake is another technique that is prominent in jazz performance. As was discussed earlier, there is more than one way to achieve this effect. The most common is to literally shake the instrument against the lips, thus producing two different notes of the same harmonic series. The second method employs a lip trill that creates rapid change in pitch. In *Solus* Friedman specifies use of the latter technique. There are a multitude of benefits to learning this technique, including: strengthening of the embouchure, consistent airflow, and aural perception of the correct pitches (Example 24).



Example 24. *Solus* Movement III. “Scherzando and Waltz”, measure 82.

Open tube technique: Friedman also calls this technique “false tones”. This concept is unique in trumpet compositions. The audible effect is stunning, especially when considering it originated from cleaning one’s horn! The technique seems easy enough but after close inspection certain challenges become apparent, the first of which is pitch. If any other horn than a C trumpet is used the pitches will not sound as printed and the whole intent of the technique will be lost. Also, I have experimented and come to the conclusion (along with the composer) that there are some brands of trumpets that will not work based on the pitch tendencies of those instruments. It is up to the student and his/her teacher to diagnose this issue and come to a reasonable solution. (Without printing any brand names, I have had great success with “conventional” instruments.) However, even with adequate equipment finding correct pitches may be challenging. For example, the first note played with the second valve depressed and the second valve slide removed should sound an F. If the player has a lot of tension in his/her body or is not using an efficient breathing model the F will naturally sound very sharp. This first phrase presents the opportunity for the student to work on aural skills and practice keeping the body relaxed using sufficient air, thereby letting the mind dictate the musical product. There is a substantial difference between the correct pitch and incorrect pitch—as much as a whole step! It will be immediately clear to the performer (or the teacher) that there is tension or if s/he is not using a full vigorous, relaxed breath (Example 25).

[Remove 2nd valve slide for entire movement]

Example 25. *Solus* Movement IV. “Fanfare”, line 1.

CHAPTER 4

CONCLUSION

As a performance feature, extended techniques are now being used with greater frequency in contemporary compositions. Often the player's level of understanding and musical perception of a given work that uses extended techniques is directly affected by his/her ability to correctly interpret and execute these techniques. Performing *Solus*, with the assistance of a written guide to the notation and interpretation, will assist with important insights not only applicable to *Solus* but to any other work that incorporates extended techniques.

Studying *Solus* encourages the acquisition of unconventional trumpet techniques and will help students foster an appreciation for contemporary unaccompanied works. This guide will also assist the studio teacher in explanation, interpretation, and execution of *Solus*. Incorporating *Solus* in the private studio assists with: the application and understanding of extended techniques in this piece and other works and genres; new and fresh musical exercises with which to develop virtuosic technique on the trumpet; and an introduction to contemporary, non-standard trumpet literature and notation practices.

Perhaps the most beneficial aspect of learning new music such as *Solus* is the ability to communicate directly with a living composer. The information I received during my interview with Stanley Friedman greatly enhanced my interpretation of *Solus* and, consequently, my approach to teaching the work. The personal anecdotes—from the development of open tube technique to the musical influences of Berio and Schwantner—were invaluable during the final preparation of my performance. Although the piece was written in 1975, the work remains a fresh, ingenious example of contemporary trumpet literature that warrants attention from both trumpet students and educators.

DISCOGRAPHY

Friedman, Stanley. *Solus*, performed by Ole Edward Antonsen, trumpet. *Ole Edward Antonsen/Einar Henning Snebye*, Smiax PSC 1041. Compact Disc.

Friedman, Stanley. *Solus*, performed by Stanley Friedman, trumpet. *The Lyric Trumpet*, Ode Record company CD ODE 1327. Compact Disc.

BIBLIOGRAPHY

- Bach, Edward Stanley. *A Performance Project on Selected Works of Five Contemporary Composers: Malcom Arnold, Robert Henderson, Stan Friedman, John Elmsly, Lucia Dlugoszweski*. D.M.A. diss., The University of British Columbia, 1991.
- Bellinger, Michael Craig. *A Model for Evaluation of Selected Compositions for Unaccompanied Solo Trumpet According to Criteria of Serious Artistic Merit*. D.M.A. diss., Louisiana State University and Agriculture and Mechanical College, 2002.
- Blatter, Alfred and Paul Zonn. *Contemporary Trumpet Studies*. Denver: Tromba Publications, 1976.
- Dallin, Leon. *Techniques of Twentieth Century Composition*. Dubuque: W. C. Brown CO. Inc., 1957.
- Dyson, George. "The Composer and the Military Band." *Music and Letters* Vol. 2, no.1 (January 1921): 58-66.
- Friedman, Stanley. Interview with the composer, February 6, 2008. Greeley, Colorado. Transcript.
- Friedman, Stanley. *Laude: Four Character Sketches for Solo Trumpet in B-flat or C*. New York: Seesaw Music Corp., 1984.
- _____. *Poem for a Fallen Hero*. Bulle, Switzerland: Editions BIM, 1997.
- _____. *Solus*. Vuarmarens, Switzerland: The Brass Press, 1978.
- _____. *Sonata*. Vuarmarens, Switzerland: Editions BIM, 1996.
- Huff, Michael. "The Use of Unaccompanied Works for Trumpet in Recital Programming and the Teaching Studio." *International Trumpet Guild* Vol. 32, no.1 (October 2007): 46-47.
- Justice, Timothy Wayne. *Twentieth Century Music for Unaccompanied Trumpet: An Annotated Bibliography*. D.M.A. diss., Louisiana State University Agriculture and Mechanical College, 1995.
- Johnson, Keith. *The Art of Trumpet Playing*. Denton, Texas: Gore Publishing, 1984.
- Koerselman, Herbert LeRoy. *A Comprehensive Project in Trumpet Literature with an Annotated Bibliography of Brass Study Materials Which Deal with Performance Problems Encountered in Contemporary Music*. D.M.A. diss., The University of Iowa, 1976.

- Lester, Joel. *Analytical Approaches to Twentieth-Century Music*. New York: W.W. Norton and Company, Inc., 1989.
- Moore, Douglas. *A Guide to Musical Styles*. New York: W.W. Norton and Company, Inc., 1962.
- Morley-Pegg, R. "The Evolution of the Modern French Horn from 1750 to the Present Day." *Proceedings of the Musical Association* 69th Sess. (1942-1943): 34-55.
- Murray, Robert. *A Performance Guide to Tomas Svoboda's Duo Concerto for Trumpet and Organ, OP. 152*. D.M.A. diss., University of North Texas, 2002.
- Persichetti, Vincent. *Twentieth Century Harmony: Creative Aspects and Practice*. New York: W.W. Norton and Company, Inc., 1961.
- Read, Gardner. "Extending the Tonal Resources of Wind Instruments: Some Contemporary Techniques." *Music Educators Journal* Vol. 63, no.1 (September 1976): 50-55.
- Risatti, Howard. *New Music Vocabulary: A Guide to Notation Signs for Contemporary Music*. Urbana, Illinois: University of Chicago Press, 1975.
- Schenker, Heinrich. *Harmony*, ed. Oswald Jonas, translated by Elisabeth Mann Borgese. Chicago, Illinois: University of Chicago Press, 1954.
- Sherman, Roger. *The Trumpeter's Handbook: A Comprehensive Guide to Playing and Teaching the Trumpet*. Athens, Georgia: Accura Music, 1979.
- Tuozzolo, James Michael. *Trumpet Technique in Selected Works of Four Contemporary American Composers: Gunther Schuller, Meyer Kupferman, William Sydemann, and William Frabizio*. D.M.A. diss., University of Miami, 1972.