

A PERFORMANCE PROJECT ON SELECTED WORKS OF FIVE CONTEMPORARY COMPOSERS:  
MALCOLM ARNOLD, ROBERT HENDERSON, STAN FRIEDMAN,  
JOHN ELMSLY, LUCIA DLUGOSZWESKI

By

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## ABSTRACT

The principal objective of this dissertation is to discuss music for unaccompanied trumpet and trumpet and tape composed after 1965. The discussion of these works will emphasize a method of preparation for each work. New techniques and effects that modern-day trumpet players will need to master will be pursued with relationship to each composition under consideration.

Each chapter is dedicated to one composition. The introductory chapter discusses the execution of difficult leaps which is one of the most common challenges in the majority of modern trumpet music. Technique books and general suggestions in the improvement of this technique are emphasized.

Chapter II features comments on Malcolm Arnold's Fantasy for B-flat Trumpet which is the most "traditional" composition of the five works being surveyed.

In Chapter III, Robert Henderson's Variation Movements, 1967 is discussed. The work has components of serialism which give way to tonally motivic material. The piece lends itself to a detailed analysis, although, for this purpose, a rather general discussion with some detail will make the musical decisions clearer.

The fourth chapter discusses Stan Friedman's Solus. This composition features the use of pedal tones, aleatoric events, the open-tubing technique, tremolos, and slide glissandi. Some analysis as

well as practice and performance suggestions are included in this chapter.

Chapter V focuses on a work by John Elmsly entitled Triptych for trumpet and tape. In addition to some analysis of the work there are performance suggestions to enable synchronization between trumpet and tape.

Chapter VI features Lucia Dlugoszewski's Space is a Diamond, the most experimental composition of the five being discussed. Innovative techniques utilized in the work include percussive bubble, glissando, flutter-tonguing, ricochet glissando, flap-tonguing, and whistle tone. New notational indications are also discussed.

The examination of these compositions demonstrates increased technical demands and analytical skills that will be required by trumpet players.

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## CHAPTER I

### INTRODUCTION

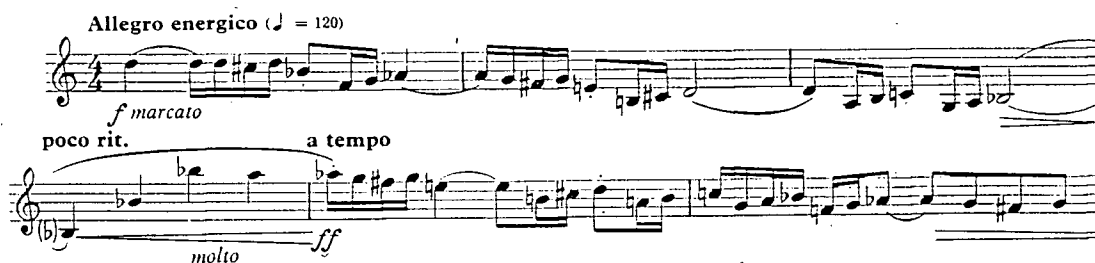
An increasing number of contemporary composers have contributed to music for the trumpet. Over the past fifty years works with trumpet and orchestra and trumpet and piano have become staples of the trumpeter's literature. Works like the Hindemith, Kennan, and Halsey Stevens's sonatas, as well as the numerous French compositions, particularly by Bozza, are regularly performed in recitals. Although the trumpet works by these composers are challenging, they do not compel the player to explore new technical frontiers. It is this keen interest in stretching the limits of both the player and trumpet technique that encouraged this discussion of works for unaccompanied trumpet and for trumpet with tape.

One of the most obvious modern-day demands of the trumpet player is the execution of awkward leaps, the physical demands of which offer even the very best players many challenges.<sup>1</sup> In a number of the works of the composers mentioned above, there are passages with large intervallic leaps. But why are these leaps less difficult than many of the works composed for unaccompanied trumpet and trumpet and tape? There are at least two responses to this important question. The first response is that composers have avoided writing many leaps that follow rapidly in succession, and the player is not often asked to play leaps larger than a twelfth. The second response is that in the standard

tonal literature it is easier for the player to "hear" the right pitch, which is not always the case in the very angular writing that is evident in works like Henderson's Variation Movements 1967 or Friedman's Solus.<sup>2</sup>

Malcolm Arnold's Fantasy for B-Flat Trumpet has passages where flexible lips are required to achieve the right pitch. Most players would agree that in example 1a the large intervals are playable.<sup>3</sup>

Ex. 1a. Arnold, Fantasy for B-Flat Trumpet, mm. 1-6.



Other works in this discussion do not offer the same ease when playing large intervallic leaps. The ability to hear all the pitches in one's inner ear is very helpful and was not a skill trumpet players in this century had to refine until the last twenty or thirty years. Obviously, one can find contradictions -- for example, the orchestral works of Webern. The ability to execute intervals in excess of an octave and the ability to hear a note before playing it are techniques that need much refinement in today's trumpet world.

Stan Friedman's Solus challenges the ear and lip flexibility of the player. In the second bar of the fourth line, the first half of the measure is awkward simply because of the atonal nature of the music. (See Ex. 1b) However, because most of the leaps are followed by a step or at least a considerably smaller leap, the section becomes

more attainable.

Ex. 1b. Friedman, Solus, "Introduction", m. 9



Perhaps the best example of an extremely difficult leap in trumpet literature is Lucia Dlugoszewski's Space is a Diamond, especially Part IV. The leaps in the third measure of the third line are large but are made increasingly difficult because the dynamic marking is "ppp" and because the required speed of the execution is rapid. (See Ex. 1c)

Ex. 1c. Dlugoszewski, Space is a Diamond, Part IV, m. 3, line 3.



On the fourth line of Part IV, there are leaps that are easier to execute because of a glissando effect.<sup>4</sup> (See ex. 1d)

Ex. 1d. Dlugoszewski, Space is a Diamond, Part IV, line 4.



Trumpet players learn to play in the high register by blowing rapidly so that the lip buzzes a higher frequency; inherent with this technique is a louder dynamic and brighter sound. There are many

commercial works where trumpet players enter on such high notes, but the players do not have to hold back on their air speed or their volume. They often use specially designed mouthpieces with a very shallow cup which helps extreme upper-register notes respond. However, the player would have little success in the compositions being discussed here, since these shallow-cupped mouthpieces do not function efficiently in the lower ranges and the tone quality is unacceptable.

In Space is a Diamond many of the leaps can only be effectively played if a half-valving technique is utilized. This half-valving technique decreases the size of hole the air travels through. The smaller the bore, the easier it is to achieve higher notes. (See Ex. 1e) Everything above  $c'''$  should use this technique and everything below  $c'''$  should be played normally with the valves pressed all the way down.

Ex. 1e. Dlugoszewski, Space is a Diamond, Part I, last 3 lines.

The musical score consists of three staves. The first staff is in 4/4 time and begins with a tempo marking of  $\text{♩} = 42$ . It features a series of notes with a *ffff* dynamic, followed by a *ppp* section, and then a *f or mf* section with a *smooth* articulation. A tempo change to  $\text{♩} = 100$  is indicated with the instruction "Must be beautiful and full." The second staff is in 2/4 time and begins with a *pp* dynamic, followed by a *pp* section with a *TK* marking and the instruction "Quite soft, like gusts of". The third staff is in 2/4 time and begins with a *pp* dynamic, followed by a *pp* section with a *TK* marking and the instruction "Quite soft, like gusts of". The score concludes with an *attacca* marking.

The works being discussed have been selected carefully in order to demonstrate the many modern styles the trumpet soloist may be able to execute. Arnold's Fantasy is composed in a traditional style. Henderson's work features atonal and serialistic techniques. In this work it is imperative that the player understand the rows so that emphasis and musical judgement are properly executed. Friedman's Solus demonstrates instrumental experimental music. Excerpts from Dlugoszewski's Space is a Diamond will also be discussed because of some of the unprecedented techniques for the trumpet being used. These ideas may be used by composers in the near future and thus deserve attention in this document. John Elmsly's Triptych features trumpet and tape, a combination that is becoming more popular with composers and trumpet players alike. This music offers new challenges, as the player must understand the contribution of not only the trumpet part but also how it relates to the taped music.

## NOTES

<sup>1</sup>Large leaps on any brass instrument can be intimidating and can also create a contradiction in the player's mind: the player must blow fast which causes the lips to buzz or vibrate a different note. When playing an ascending leap, for example, the player will increase the speed of air and will in turn make the aperture of the lip smaller. The contradiction lies in the fact that the execution of the leap requires that the player be very relaxed to allow for proper air support. Any type of short, nervous breath will decrease the successful execution of the leap.

<sup>2</sup>When preparing a program of such challenging music it was decided that much practice of flexibility exercises helped increase the elasticity of the lip. Three specific technique books proved beneficial in the everyday preparation of the music. Herbert Clarke's Technical Studies, Schlossberg's Daily Drills and Technical Studies, and Robert Nagel's Trumpet Skills helped increase the lip's ability to perform the large number of difficult leaps that are so prominent in the music. This type of music necessitates focus on playing large intervallic leaps many times in succession at a rapid tempo.

<sup>3</sup>The reason these octaves are easier to play is that the notes are easy to "hear" and that the dynamic level, forte, allows the player to release the air in a more uninhibited manner.

<sup>4</sup>The player simply compresses the valves half way while steadily increasing the air speed and tightening the lips until the required upper pitch is attained. Of course the dynamic marking of mf --- ppp on each glissando upwards makes the execution very difficult. A crescendo to the upper notes is the typical manner in which a player will play these types of leaps. It is significant to note that in the published version of Space is a Diamond, comments by Dlugoszewski, the composer, and Schwarz, the performer (who first recorded the composition) deal specifically with these inherently difficult leaps. Dlugoszewski's first comment about the work states "a sense of hugeness, transparency, delicacy of brilliance, speed and frequency of sudden daring leaps into disparate dynamics and the passionate capacity for expression of a solo instrument with essentially linear possibilities: meditations along these lines created the music of Space is a Diamond."

She continues by saying "as a result of structural challenges implicit in working with large dimensions, many new ways of playing the trumpet were invented." Her obvious association with brass specialists like Gerard Schwarz and Gunther Schuller helped Dlugoszewski explore "some of these new ways of playing the trumpet." The performer should carefully read the performance notes included in the published version.

## CHAPTER II

### MALCOLM ARNOLD'S FANTASY FOR B-FLAT TRUMPET

The compositions selected for discussion were chosen because of the variety of different techniques and with the intent of demonstrating differing compositional styles and techniques. Malcolm Arnold's Fantasy is composed in a style where the tonal goals are obvious. Between 1966 and 1975 Arnold composed fantasies for all the main brass and woodwind instruments as well as for guitar and harp. The trumpet Fantasy is a piece that is one of Arnold's most successful fantasies. He also composed a trumpet concerto which is gradually becoming important in the trumpet repertoire. His brass quintet is one of the most famous and is regularly performed. Malcolm Arnold wrote so well for wind and brass instruments, especially the trumpet, because he was an accomplished trumpet player. In his own words:

When I was twelve I left school because of bad health -- I had asthma. At that time I wanted to play the trumpet. My doctor took me to the family doctor who said, 'if that doesn't cure him, it'll kill him: so tell him to do it.'<sup>1</sup>

Apparently no ill effects were experienced by the young, aspiring trumpeter and Arnold quickly advanced on the instrument under the careful instruction of Ernest Hall, the principal trumpet player with the BBC Symphony Orchestra. It is to Ernest Hall that the Fantasy for B-Flat Trumpet is dedicated.

In this same interview, Arnold discussed some of his significant

early influences.

My original idol was Armstrong. I started with jazz, and afterwards classical music. We had a family jazz ensemble in Northampton, where I grew up, and we played on Sundays, even though my father was a Primitive Methodist. The first composers I admired were Handel and Purcell. There are those gorgeous trumpet parts for St. Paul's Westminster Abbey. I used to love them: I would play them on my own for sheer enjoyment. Then there was Debussy, Faure, and Delius. Their uses of colours has always impressed me. I loved playing Mahler's music and bought all the scores I could find.<sup>2</sup>

Malcolm Arnold became a member of the London Philharmonic Orchestra in 1941 and became principal trumpet in 1942. He is keenly aware that his music is traditional -- music that has obvious tonal goals and recognizable thematic material. He states:

that his music should be considered "traditional." It's very easily attacked because of this. I'm not ashamed of sentimentality -- not at all. I think new music should be accessible. That was Hindemith's thing -- although he went over the top with Gebrauchsmusik -- but the idea of music for youth and for the people is very important. Hindemith's music is so beautifully placed. All my music is meant to be playable by amateurs or professionals -- I believe strongly in that -- and that it should contain every variety of mood.<sup>3</sup>

The two outer sections are fanfare-like, making for a powerful beginning and ending to the composition. These two sections will be designated as A and A1. Each section has clear beginnings and endings. The opening A section, ending on a sustained e', takes the music into a frantic 6/8 rondo which will be designated as the B section. (See Ex. 2a)

Ex. 2a. Arnold, Fantasy for B-Flat Trumpet, mm. 18-24.

3

**C** Vivace (♩ = 126)

*pp leggiero*

*ff*

The sustained e' announces an important structural point, but obviously the changed time signature and the definitive change to a lighter and faster articulation also indicate a new section. The C section is equally apparent, again by the use of a sustained e'', a change in time signature -- 3/4 -- and a very lyrical theme. Indicated below is Example 2b, the lyrical theme of the Fantasy.

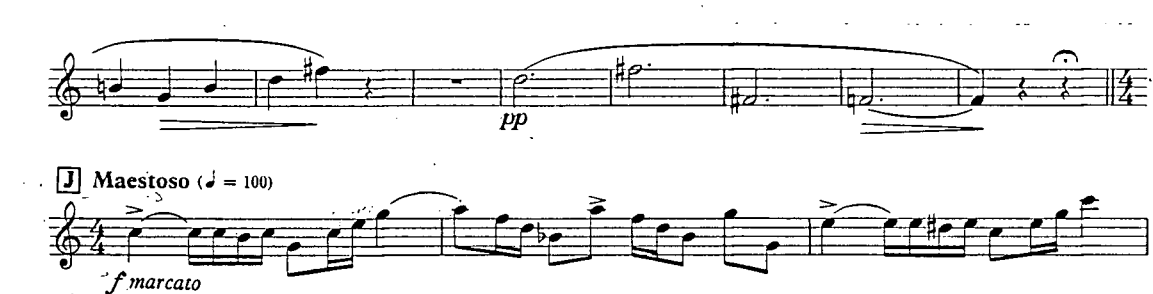
Ex. 2b. Arnold, Fantasy for B-Flat Trumpet, mm. 67-79.



Example 2b shows two staves of musical notation. The first staff is in 3/4 time, marked 'Allegretto (♩ = 92)', and features a series of eighth notes followed by a sustained note. The second staff is in 3/4 time, marked 'p cantabile', and features a series of eighth notes followed by a sustained note.

There is no hint of atonality in this work as is demonstrated by the triadic C section above. Triadic sections like this can be found throughout the work. The A1 section is again announced by obvious structural components. The music stops between section C and A1, supplying a dramatic pause as well as demonstrating the composer's appreciation of endurance problems on the instrument. (See Ex. 2c)

Ex. 2c. Arnold, Fantasy for B-Flat Trumpet, mm. 101-11.

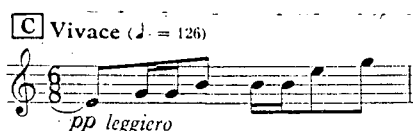


Example 2c shows two staves of musical notation. The first staff is in 3/4 time, marked 'Maestoso (♩ = 100)', and features a series of eighth notes followed by a sustained note. The second staff is in 3/4 time, marked 'f marcato', and features a series of eighth notes followed by a sustained note.

As mentioned earlier, the Fantasy C section is based entirely on a

triadic theme. It is quite apparent that Arnold intends the work to be approachable by even the amateur who, even today, would have some trouble handling works with no suggested harmonies and tonality. There is hardly a measure of music where the intended harmony is not obvious. The Vivace section, designated as B, uses three traditional ways of indicating simple harmonies. In the first bar, measure 22, the e minor triad is outlined. (See ex. 2d)

Ex. 2d. Arnold, Fantasy for B-Flat Trumpet, m. 22.



The tonal orientation of the whole piece is C major. Malcolm Arnold changes the colour of the work considerably by using the relative minor of G major -- E minor. The work would be much less inventive, harmonically and tonally, if the composer had settled on using the dominant of C major all the time. In measure 14 and 15 there is a strong dominant G. This also occurs in measures 19-21. (See ex. 2e)

Ex. 2e. Arnold, Fantasy for B-Flat Trumpet, mm. 14-21.



Measures 68-70 push towards a potential G major area but at the last moment at which the listener expects the V, e minor substitutes it. (See ex. 2f)

Ex. 2f. Arnold, Fantasy for B-Flat Trumpet, mm. 68-71.



The dynamics help demonstrate the conflict between G major and E minor. In Example 2d (also 2e) the dynamic level -- "ff" -- occurs on the G and there is a sudden and dramatic decrescendo as soon as the e minor tonal area is apparent. Only in the final section -- A1 -- is there a decisive V-I cadence. In the fourth and fifth measures of K the G tonal area is accented. The anticipation of the dominant chord's arrival is greater than the anticipation of the tonic because the dominant is consistently substituted by its relative minor "E". (See ex. 2g)

Ex. 2g. Arnold, Fantasy for B-Flat Trumpet, mm. 117-20.



There are, of course, a number of scales used in this work, but the only time a scale built on g occurs is at measure 122, where it frames the dominant chord in a traditional assertion of tonality. (See ex. 2h)

Ex. 2h. Arnold, Fantasy for B-Flat Trumpet, mm. 121-26.

**accelerando**

**ritardando**

#### NOTES

<sup>1</sup>Andrew Stewart, "Malcolm Arnold," Music Teacher (June, 1989): 25.

<sup>2</sup>Ibid., p. 25.

<sup>3</sup>Ibid., p. 26.

### CHAPTER III

#### ROBERT HENDERSON'S VARIATION MOVEMENTS, 1967

For the performer and the general listener, Henderson's Variation Movements, 1967 is dramatically different than the Arnold Fantasy just discussed. Although the piece lends itself to detailed analysis, for this purpose a rather general discussion, with some detail, will make the musical decisions clearer.

Robert Henderson was born in Pimona, California on May 13, 1948. He currently holds the position of musical director and conductor of the Arkansas Symphony in Little Rock, Arkansas. He has studied the violin, French horn, and piano as well as composition. At California State University, Henderson worked with Daniel Lewis and Donal Michalsky. In addition, he studied with Ingolf Dahl at U.S.C. Among Henderson's awards is the prestigious B.M.I. composer's grant, of which he was one of the youngest recipients. Of note is that the Variation Movements, 1967 was the featured composition in 1978 at the Munich Instrumental Competition.

This composition has components of serialism using a nine-note row rather than the more frequently used twelve-tone row. There are five movements, each of which utilizes the nine-note row which is presented at the beginning of the first movement. (See Ex. 3a) This first movement is, significantly, entitled "Theme." The breath mark at the end of measure 3 makes it clear that the row --in its most complete

form -- has been presented.<sup>1</sup> (See Ex. 3a)

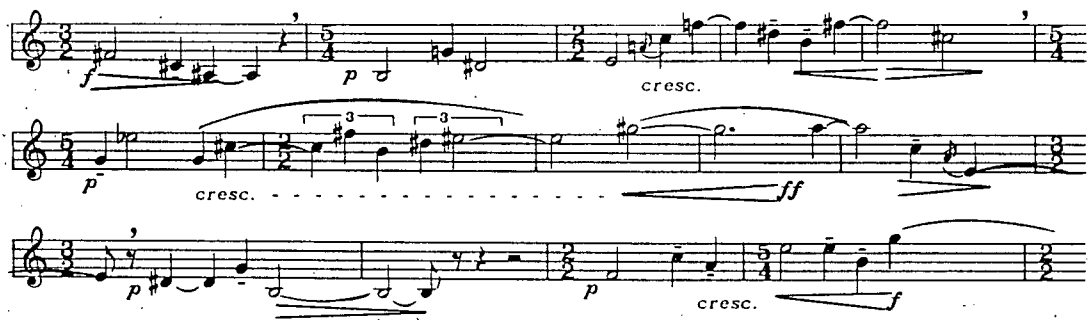
Ex. 3a. Henderson, Variation Movements, 1967, First Movement, mm. 1-9.



At the beginning of measure 4, the  $d\sharp$  is the first repeated note of the composition. This pitch has important ramifications in this movement. It is the first note of the second phrase. In strict twelve-tone technique a particular pitch should not come between two statements of the row. Also, the first two lines of the first movement show that the second breath mark comes before the  $g$ , which is the ninth and final note of the nine-note row.

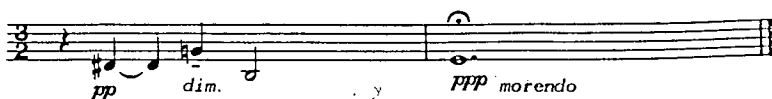
Although, as mentioned, the Henderson has components of serial music, two significant features are evident, especially in the first movement: 1) the first nine notes, while being serialistic in themselves, do hint at tonality, and 2) the movement begins and concludes with an  $e$ . Throughout the work, the serialistic components give way to tonally motivic material. Because of the close association between the  $d\sharp$  and the  $e$  and the former pitch's obvious leading tone tendencies, the assumption in serialism is that the two notes would not be placed by one another. With the  $d\sharp$  appearing before the  $e$ , especially one note before, suspicions of a tonal centre are well-founded. There are two examples where the  $d\sharp$  appears directly before  $e$  -- measures 20-21 (See Ex. 3b) and measure 4 (See Ex. 3a),

Ex. 3b. Henderson, Variation Movements, 1967, First Movement, mm. 10-18.



The cadential formula seen in the last two bars delays the leading tone  $d\sharp'-e'$ . There is, however, no question of a tonal centre as the music resolves on the  $e'$ . (See Ex. 3c)

Ex. 3c. Henderson, Variation Movements, 1967, First Movement, mm. 53-54.



The first movement features a number of appearances of the cadential formula. The appearance of the formula at measures 29-32 is

particularly interesting because the resolution to the e'' is delayed. (See Ex. 3b) In a traditional manner, Henderson is able to capitalize on the ear's tonal expectations by delaying the resolution. Measure 31 delays the inevitable. It is crucial that the dynamic markings are adhered to. After the g' a decrescendo begins on the low b. Measure 31 with the f' c'' a' is piano, and measure 32, with the e'', is not only being encouraged by a crescendo but, for the first time in the piece, a note is repeated consecutively. Not surprisingly, the repeated note is e''.

The cadential formula found throughout the first movement also indicates important tonal relationships. Each note can be shown to have some relationship to e. the d#, as mentioned earlier, is the leading tone to e minor; the b is a dominant of the tonic e area; and the g is the relative major of e minor.

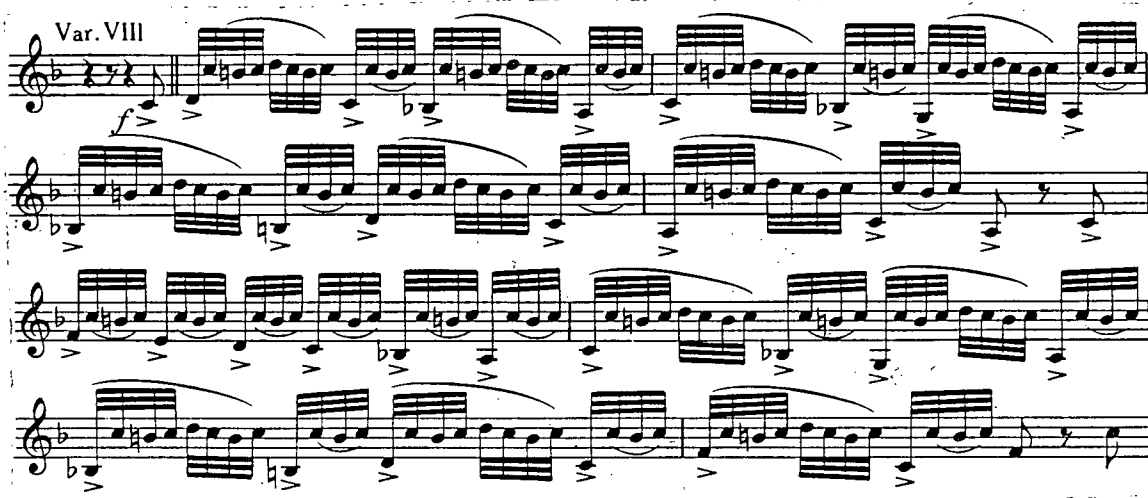
The second movement features a variation similar, in concept, to the final variation of the famous cornet solo, Carnival of Venice by Arban. In the Arban, the main theme is accented under a turn, as opposed to the Henderson which has the most obvious melodic line in the upper voice. Another difference between the Carnival of Venice and the Henderson composition is that the latter is more complex in rationalizing the source of the pitch material.

Shown below is the main theme of the Carnival of Venice. The relationship between the theme (See Ex. 3d) and the final variation (See Ex. 3e) is illustrated not only by the accents but also by the registral change between the accompanying line and the theme line.

Ex. 3d. Arban, Carnival of Venice, Theme.



Ex. 3e. Arban, Carnival of Venice, Var. VIII.



Given below is the Henderson Variation Movements, 1967 theme or prime row. (See Ex. 3f)

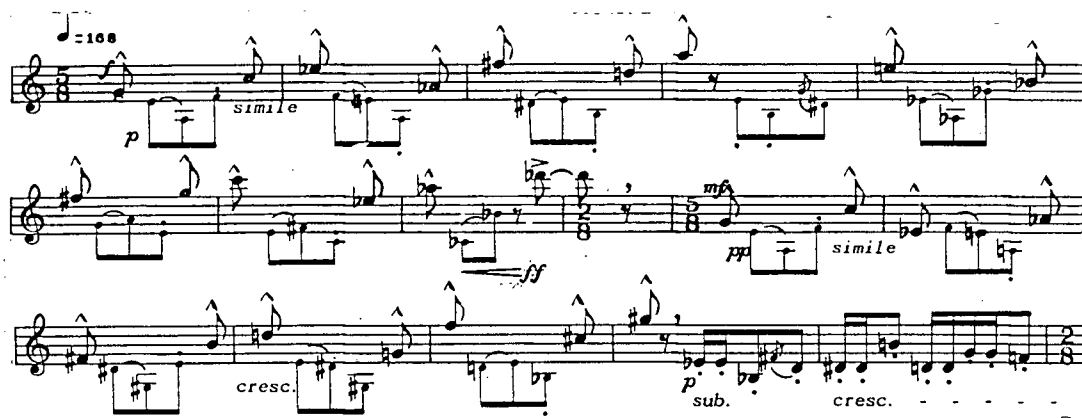
Ex. 3f. Henderson, Variation Movements, 1967, First Movement, mm. 1-13.



The variation, movement two, uses the same idea of register change, as well as articulation, and dynamic changes -- loud for the upper notes

and soft for the lower notes.<sup>2</sup> (See Ex. 3g)

Ex. 3g. Henderson, Variation Movements, 1967, Second Movement, mm. 1-16.



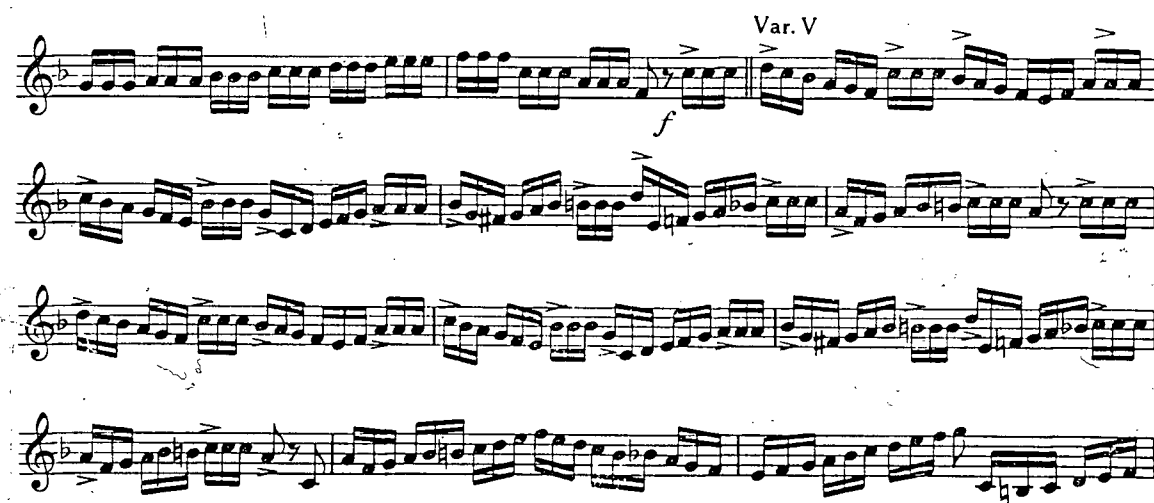
There is transposition of a minor third between the notes in the first line of the second movement with those of the first movement. It is significant to establish (since it is, primarily, a theme and variation piece) some relationship with all movements to the first movement. In the Arban solo the cornet is given a theme (See Ex. 3d) which it then ornaments in the different variations. Example 3e features the cornet outlining the theme with accented notes. The remainder of the notes in the cornet part serve as an accompaniment to these accented pitches which are written in the lower register. Henderson's second movement follows this same form of variation. In example 3g the P3 form of the series (the theme) is accented loudly while softer and lower notes serve as an accompaniment.

The accompaniment to the accented melody in the Henderson is more complicated than the Arban. These lower note groups have some relationship to something that has occurred either in the first movement or as the second movement progresses. Three examples will be given. The first example is from measure 4. This is an interesting measure because there are four notes instead of the more common three-

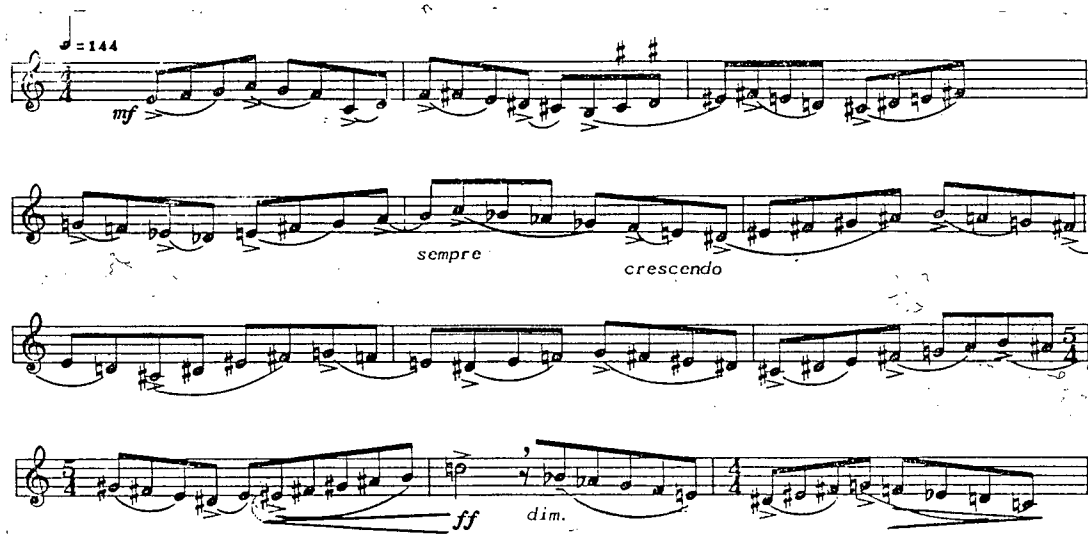
note pattern that permeates the movement. This is the cadence formula that concluded the first movement. Not only does the grace note add attention to this section but the dramatic rest before the four notes is reminiscent of the first movement. It should be recalled that a rest preceded every statement of the cadential formula. (See Ex. 3g) Measure 5, the second example, uses a three-note group in the lower voice that is found in the upper voice in measures 2 and 3. In the third example the seventh measure features e' f# c as the three note set. The origin of this particular set is the upper voice of measures 5, 6, and 7 on the downbeat of each aforementioned bar. (See ex. 3g)

In the third movement, from measures 1-10, all the accented notes coincide with the thematic or tone row pitches heard at the beginning of the first movement. This variation technique is reminiscent of the Carnival of Venice cornet solo discussed with its close similarities in the second movement of this composition.<sup>3</sup> Two similar types of variation techniques are shown in Examples 4a and 4b.

Ex. 4a. Arban, Carnival of Venice, Var. V.



Ex. 4b. Henderson, Variation Movements, 1967, Third Movement, mm. 1-12.



In the variations of the two themes, both composers write out rapid passages -- eighth notes for the Henderson and triplet sixteenth notes for the Arban -- with the accented notes representing the exact thematic material. The Henderson utilizes this standard variation technique found in much earlier popular cornet literature.

Henderson stops the note-for-note relationship (at least with the whole row) at measure 11. It is the different time value in measure 11 that signals the whole theme will not continue. However, the variation technique will continue to be utilized in this movement. There are other important compositional elements that give a clue that something different might occur. For example, it is the loudest point of this particular movement helped by a rather large crescendo; also, it is the first moment of silence in the movement. (See Ex 4b)

The note-for-note relationship, at least with the whole row presented at the beginning of the first movement, ceases at measure 11.

At measures 12-14 the cadence formula from the first movement is outlined  $d\sharp' g' b$ , but significantly, the resolution to  $e'$  found at the end of the first movement is lost. Instead measures 14-16 are a rough sequence using  $f\sharp' b' d''$ . Measure 15 simply ornaments the accented notes like the earlier part of the movement. Measure 16 then resolves, initially to the  $g'$  -- dramatically at the piano dynamic. At this point of the work the  $g$  is a note of significance. It helps predetermine the final note of the movement -- the  $g'$  which occurs in measure 32. The symmetry of the two appearances of the  $g$  as cadence notes is obvious. The first  $g'$  in measure 16 and the final note  $g'$  at the end of the movement. (See Ex. 4c)

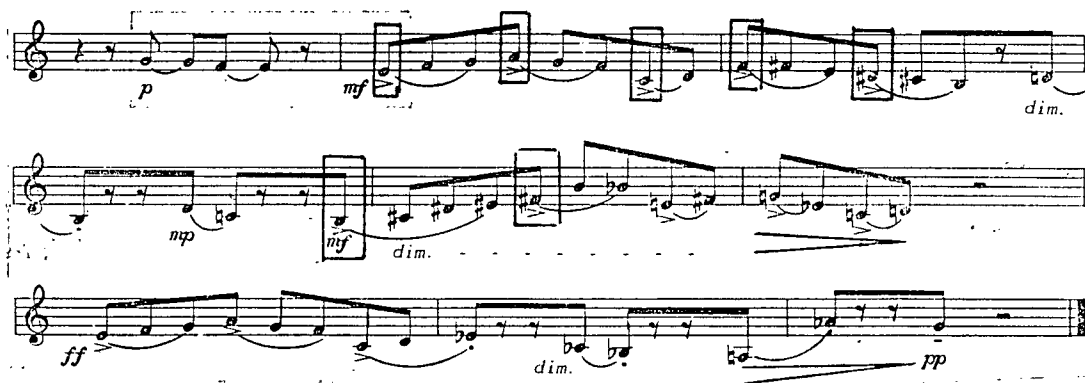
Ex. 4c. Henderson, Variation Movement, 1967, Third Movement, mm. 13-16.



This movement gives a sense of two pitches --  $g$  and  $a$  -- battling for superiority as the tonal centre. For that matter the fourth movement continues the tension between these two notes. One of the spots in the music that demonstrates this tension occurs from measures 25-30. (See Ex. 4d) The accented notes of measure 30 and measure 25 --  $e' a' c'$  -- spell an "a" minor triad. Measure 30 and the last beat of measure 29 features, as accented notes --  $e' g' c'$  -- which spells a C major triad. The  $e'$  and  $c'$  are common notes to the two triads with  $g'$  and  $a'$  as the only unrelated notes. Dynamically, the accented  $a'$  appears stronger in measure 30 than the accented  $g'$  of measure 29. The

music descends chromatically in the final two measures going as low as the low a, but then leaping to the a<sup>b</sup> and concluding on a g' at a pianissimo dynamic. Perhaps it is with a sense of musical humour that Henderson places the pianissimo g' in the same rhythmical point as the fortissimo a' of measure 30. (See Ex. 4d)

Ex. 4d. Henderson, Variation Movements, 1967, Third Movement, mm. 24-32.



The fourth movement is a refreshing change of atmosphere from movements 2 and 3. The movement is in three sections, a standard compositional feature of the variations. The use of two different mutes separated by an open section defines the three sections. The first section, from measures 1-12, uses the straight mute; the second section, from measures 12-26 uses the open instrument; and the third section, from measures 27 to the end uses the harmon mute.

This movement does depend on the row but certain thematic events from earlier movements are obvious. In the middle section it uses small flashbacks -- quasi cadenza -- from the three earlier movements. However, it is the third movement that is most closely related to the fourth movement. More significant than the obvious relationship from the first three movements are the tensions between the a and g discussed in movement three, especially at the end of that movement.

The ear is drawn to the similarities between the first bars of the third and fourth movements because of shared pitches e' f' g' a' g' in the same register. (See Ex. 5a and 5b) Not surprisingly, the sharing of pitches stops after the fifth note g'. Curiously, although the g' is the final note much of the first section focuses on the "a". After the breath mark in measure 10 the a is heard four times. The first two times it is accented; the following two times it is not. Also, there is a diminuendo to pianissimo, a rest, and a# concludes the first section. Apparent focus on the a is spoiled as this pitch serves as the leading tone to a#. (See Ex. 5b)

Ex. 5a. Henderson, Variation Movements, 1967, Third Movement, mm. 1-2.



Ex. 5b. Henderson, Variation Movements, 1967, Fourth Movement, mm. 1-12.

Slow and in a lyric style

Straight mute

dim. open

The middle section, which begins at measure 13, is written predominantly in the low register until the a'' in measure 23. In this movement the highest, loudest, and lowest notes are all "a". Also of note is the use of the cadence formula from the first movement. The

rests are important, especially the sixteenth rest, where Henderson has indicated that the last sixteenth note be played very short. It is imperative that the  $d\sharp-e$  relationship not be muddled by poor execution. The length of notes must be perfect for the cadence formula to be recognized. (See Ex. 5c)

Ex. 5c. Henderson, Variation Movements, 1967, Fourth Movement, mm. 11-28.

After the powerful  $a''$  a quasi cadenza closes the middle section. Measure 26, the final measure of the second section, contains material taken from measures 33-36 of the first movement. This part of the first movement, like the final measure of this section, cadences very softly on the  $g'$ , disrupting the short-lived climax on the  $a''$  in measure 22. (See Ex. 5c)

In the third section, measures 27-28 transpose the first measure of the third movement up a major third. This note-for-note transposition, however, stops on the downbeat of measure 20 in the fourth movement. The  $f\sharp'$ , significantly, rises to the  $g'$  in measure 29 instead of an  $a'$  had the transposition continued. This is proof that

the "a" and "g" are struggling for superiority. (Compare Exx. 5a to 5d)

Ex. 5d. Henderson, Variation Movements, 1967, Fourth Movement, mm. 26-40.

Measures 31 and 32 place the first four notes of the first movement theme in retrograde building to a crescendo on the only  $g''$  of the movement. Not surprisingly, the  $g''$  moves chromatically to the lower  $a'$  getting progressively softer. This  $a'$  has little emphasis because the cadential formula follows immediately in measures 34-36. This refocus on the "e" also gives way to a presentation of the initial row missing only one note -- the "a". The  $g\sharp'$  in measure 39 hints at an  $a'$  but instead a rest follows. The  $f\sharp'$  in the measure before patiently waits for the  $g'$  which appears at "ppp". (See Ex 5d)

Henderson's fifth movement features a three-voice fugue. When the second voice presents the fugue subject at measure 7 the music is written on two staves. Similarly, when the fugue subject is presented in a third voice the music is written on three staves. This facilitates the ability of the composer to insert countersubjects in the other voices. For example, when the fugue subject enters in the

second voice at measure 7, the first voice executes a countersubject based on interjectory trills. (See Ex. 6a) At measure 17, when the third voice announces the fugue subject, the top line presents another countersubject of triplet notes while the middle voice continues the countersubject based on the trills.<sup>4</sup> (See Ex. 6b)

Ex. 6a. Henderson, Variation Movements, 1967, Fifth Movement, mm. 1-8.

Ex 6b. Henderson, Variation Movements, 1967, Fifth Movement, mm. 13-20.

This movement could be discussed in great detail with focus on the fugue form and all of the related rows and their contribution. However, there is something far more interesting to explain and that is

why the piece ends on "c#". There are many places in the fifth movement that substantiate this ending and it is this angle that will be pursued in this document.

The first episode involves the first six measures of the movement and their obvious relationship to the beginning of the first movement. Measures 5 and 6 use the same pitch material as measures 4-7 of the first movement and again this presentation stops on a "c#" in measure 6 of the fifth movement as it was stopped by a breath mark at the end of measure 7 in the first movement. (Compare Exx. 6a to 3a) When comparing this section with the parallel events in the first movement it is apparent how the "c#" was selected as the final note of the composition.

Measures 17-19 are of significance as the fugue subject is a major third higher than the prime 7 presentation starting at measure 11. In addition the countersubject is also transposed up a major third. However, the b trilling should have moved to a#; dramatically, the trill resolves to c# interrupting what was an obvious intervallic relationship. (See Ex. 6b)

There are countless points in the music where various intervallic relationships are interrupted by the "c#". The expectancy of that "c#" is greatly enhanced if the performer realizes this.

At measure 36 the first staff begins a significant presentation of three rows which end in the middle of measure 42. The first row is P-5, the second is P-8, and the third is P-2. During these three presentations the second staff continues to play the fluttertongued pitches as accompaniment while the bottom staff continues the rhythmic figures originating from the second movement. There are some important

pitch concerns in this section which involve the "c#". Between the presentation of the P-5 and P-8 versions of the subject in the top staff there is one note which does not fit in either presentation -- c#--. Also, in the countersubject of the middle staff, the g#- c#- found in measure 39 of the top staff is repeated. A definite dominant-tonic relationship. (See Ex. 6c)

Ex. 6c. Henderson, Variation Movements, 1967, Fifth Movement, mm. 37-44.

The musical score for Example 6c consists of three staves. The top staff has two measures: the first is labeled 'P5' and the second is labeled 'P8'. The middle staff has two measures: the first is labeled 'P2'. The bottom staff has two measures; the first measure is empty, and the second measure is marked with a piano 'p' dynamic and a 'cresc.' (crescendo) marking. The music is written in 3/4 time and features various intervals and a dominant-tonic relationship.

The third section, beginning at measure 45, develops the interval of a perfect fourth. These fourths, however, are not the key issue of these three measures. All pitches are present in these three measures except f# a# and c#. As can be observed in the last measure these pitches are integral. (See Exx. 6d and 6e)

Ex. 6d. Henderson, Variation Movements, 1967, Fifth Movement, mm. 45-

52.

Ex. 6e. Henderson, Variation Movements, 1967, Fifth Movement, mm. 66-68

The "f#" has great significance in the buildup to the cadence from measures 24-30 that closes the first section. The "f#" acts as the dominant to the "B" area and its relationship to the "B" area is that of a tonic dominant relation as well. (See Ex. 6f)

Ex. 6f. Henderson, Variation Movements, 1967, Fifth Movement, mm. 24-32.

Some important elements can be found in measures 49-50. In measure 49, combining all voices with the middle staff in measure 50 presents the fugue subject in its original pitch form. However, the whole subject is not presented. The eighth note following the  $f\sharp$  should have been " $c\sharp$ ." Instead the top voice transposes the final three pitches of the middle voice of measure 50. (See Ex. 6d) By looking at the last measure (Ex. 6e) the "F" triad is outlined in the first beat. In measure 49 and 50 the second, third and fourth notes of the row a c f are given. It is imperative that the articulation be executed so that the  $e'$  is not considered part of this three-note set. Also, the C major triad in the top staff of measure 50 is included in the second beat of the final measure. Finally, the  $f\sharp$   $a\sharp(B^b)$   $c\sharp$  is apparent because of the three-note group's absence in measures 45-47 when all twelve notes were seemingly going to appear. It cannot be random thought for the  $F\sharp$  triad to be absent.

Finally, there is the relationship to the first measure of the

first movement. The first three notes spell an "a" minor triad. The fifth of the triad is the "e" which concludes the first movement. The discussion of the F# triad in the final measure and measures 45-47 of the fifth movement substantiates the C# as the fifth of that triad and thus the concluding pitch. This is a good example of a composer unifying all of the substantial musical elements.

## NOTES

<sup>1</sup>Already, there is an important performance decision, as the initial tendency would have been to play through the breath mark. Musically, this would be an error as it would distort certain linear and even harmonic goals found in the movement.

<sup>2</sup>The Henderson is more difficult than the Arban because the leaps are much wider and more difficult for the player to hear. In addition, the adherence to perfection with regard to the dynamic markings adds awkwardness. This passage has to be practised very slowly at first with not only precise pitches but also equally precise dynamics. An error in dynamic levels is more damaging to the integrity of the movement than would be a missed note.

<sup>3</sup>The theme of Carnival of Venice can be reviewed in Example 3d and the theme of the Henderson can be reviewed in Example 3f.

<sup>4</sup>This scoring device is very helpful when performing and learning the movement in order to understand where the thematic material is. Reading music like, this, however, is rather confusing and it could be suggested that each individual line could be condensed into one line as trumpet players' are accustomed to reading.

## CHAPTER IV

### STANLEY FRIEDMAN'S SOLUS

Stanley Friedman's Solus was selected because of its combined use of a number of innovative techniques now demanded of the modern day trumpet player. The most significant of innovative techniques found in this composition include micro-tuning, slide glissandi, pedal tones, open tubing, and aleatoric rhythms and pitches.

His trumpet instructor was Sidney Mear, to whom Solus is dedicated. His composition instructor was Samuel Adler. He has won a number of distinguishing awards for his compositions. Solus was the second place winner of the 1976 International Trumpet Guild contest.

The first movement of Friedman's Solus entitled "Introduction" begins with a one bar theme that will be developed and treated in a number of different ways. The opening measure will often appear transposed at different pitch levels as seen in measure 12. (Compare Ex. 7a to Ex. 7b)

Ex. 7a. Friedman, Solus, first movement, mm. 1-2.



Ex. 7b. Friedman, Solus, first movement, m. 12.



In the first movement certain intervals are developed particularly the major seventh (d<sup>b</sup> to c<sup>''</sup>) or its inverted form of a minor second. (See Ex. 7a) The final four pitches of the movement, f<sup>''</sup> c<sup>''</sup> d<sup>b</sup> a, presents a retrograde version of the first measure. (Compare Ex. 7a with Ex. 7c)

Ex. 7c. Friedman, Solus, first movement, mm. 42-46.



Different valve effects like the tremolo and different articulation effects like fluttertongue are utilized in the presentation of the theme. (See Ex. 7c)

The first movement is in three sections. The first of these is completed on a d<sup>''</sup> "ppp" followed by a fermata and a double bar. The middle section, beginning at measure 12, restates the theme at a different pitch level and introduces the greatest number of contemporary trumpet techniques in the movement. Measures 15-17 feature a number of standard trills. All of the trilling is a development of the major seventh interval of the opening; the trill is the related minor second interval. (See Ex. 7d)

Ex. 7d. Friedman, Solus, Solus, first movement, mm. 15-17.



Measure 18 demonstrates a contemporary effect known as the slide glissando. Friedman defines it as being produced by manipulation of the first and third valve slides as shown below:

2 slide 3 -- depress valves two and three and extend the third valve slide to lower pitch

1 slide 1 -- depress valves one and two and extend the first valve slide to lower pitch

The reason the slide glissando is becoming a popular compositional technique for trumpet literature is to enable the instrument to utilize a different timbre and also to simulate changing pitch more like a trombone. This effect requires special attention as the pitch is often difficult to execute perfectly.<sup>1</sup>

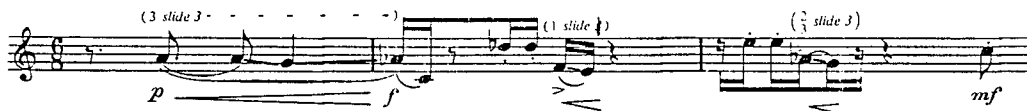
Ex. 7e. Friedman, Solus, first movement, mm. 17-18.



In measure 20, the first slide glissando is a whole step  $a' g'$  which is rather awkward followed by a second glissando from the  $g' a^{b'}$ . When the alteration of pitch is more than a semitone the movement of the slide will not be sufficient to bring the pitch a whole step down. In addition to moving the third slide the player must "lip" the note down. Moving from the  $g'$  to the  $a^{b'}$  is not difficult except that it is

a different fingering combination than in measure 18.<sup>2</sup> (See Ex. 7f)

Ex. 7f. Friedman, Solus, first movement, mm. 20-22.

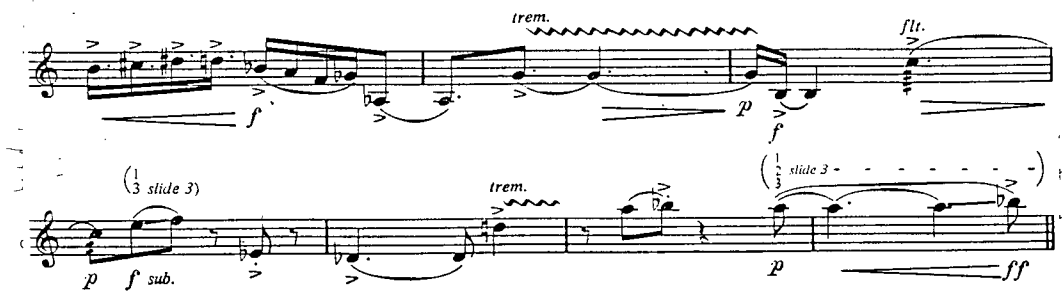


The  $f'-e'$  slide glissando is not possible with the given fingerings (1 slide 3). This is undoubtedly a misprint in the published version (see Ex. 7f) as Friedman, who is an accomplished player, would be aware that 1 slide 1 is the only workable combination for these two pitches. Moving the third valve slide when using the first valve has no effect on the pitch. In any slide glissando the first or third valve has to be used. If it is only the first valve, then the first valve slide must be used. The same holds true for the third valve slide.

Measure 22 is a sequence of measure 21 and the  $a^b-g'$  slide glissando is not particularly difficult. It is not difficult because the player can start on a note that will use a regular fingering and slide to the note which will not. It is much more difficult to execute in the reverse order where the false fingering is combined with the slide out. (See Ex. 7f)

Measures 26 and 29 are especially difficult slide glissandi. Getting the  $e''$  and the  $a''$  in the respective measures, with the respective valves depressed and slides out, is increasingly awkward as it seems the higher one goes the less predictable the result will be. In addition, measure 26 is harder because the pitch before uses the flutter tongue. (See Ex. 7g)

Ex. 7g. Friedman, Solus, first movement, mm. 23-29.



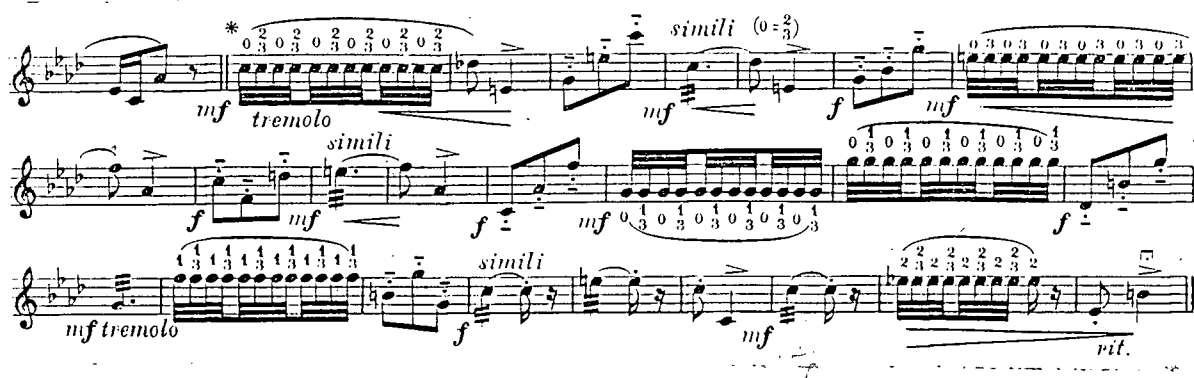
The final technique required in the first movement of the Friedman is the tremolo. This effect sounds like a trill but the trill moves to the same note. This is achieved by alternating the regular fingering pattern. For example, the d'' in measure 19 is played with the first valve depressed alternating rapidly with the 1/3 combination. (See Ex 7h)

Ex. 7h. Friedman, Solus, first movement, m. 19.



Most college players will experience their first use of the tremolo in jazz music. The classical player sees the tremolo in "Etude #17 Intervalles (Les Sixtes)" from Charlier Trente-six Etudes Transcendantes pour Trompette. The particular excerpt is especially helpful to practice in conjunction with preparing the first movement of the Friedman. (See Ex. 7i) The player should strive to make the notes very even and rhythmic.

Ex. 7i. Charlier, Etude #17, mm. 124-48.



The third section, which begins at measure 30, starts with a presentation of the theme with rhythmical modifications. It features a number of ideas discussed in the earlier sections. The piece concludes with the theme in retrograde. (See Ex. 7c)

The second movement of Solus is entitled "Furtively." The Shorter Oxford English Dictionary defines "Furtively" as: "done by stealth; clandestine, surreptitious, secret 2) of a person, etc: Stealthy, sly 1858 3) Stole; also taken by stealth or secretly 1718 4) Thievish 1816."

Gene Young commented on the second movement saying:

A muted staccato prevails throughout the second section which is marked appropriately, "Furtively." The harmon mute is employed to further enhance the apprehensive mood. The notation is free, reflecting the atmosphere desired, and accelerandos and ralentandos are indicated through banding, a most common present day notational device. There is a moderate use of slide extensions to alter pitch, and, gratefully, little application of the overused hackneyed "Wah." The movement is effective and indicates that music does not have to be technically impossible to be successful.<sup>3</sup>

The three sections in this second movement are bordered by a registral change that is most audible to the listener -- this is by use of pedal tones.

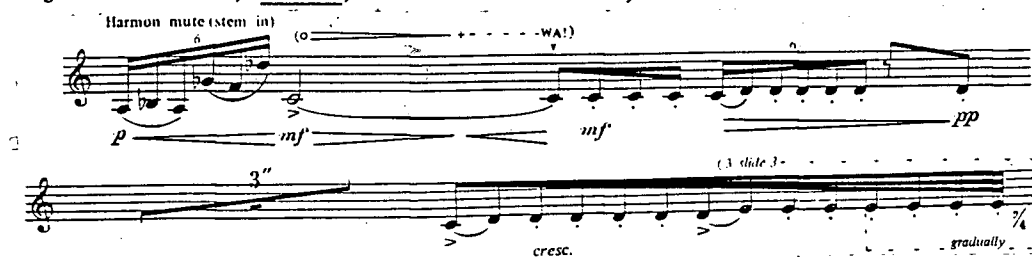
The first section comprises the first six lines of the movement with the pedal tones concluding. The second section begins in the

middle of the sixth line and concludes in the middle of the fourth line of the second page again signalled by the pedal tones. The third section begins at the end of the fourth line on the second page concluding "furtively" at the "ppp" a<sup>b</sup> flat after a three-second delay.

The outer sections, unlike the middle section, use the lower range of the trumpet predominantly. The middle section has a much louder dynamic marking and is much more disjunct, using many higher pitches.

There are a number of contemporary features in this second movement. The use of aleatoric rhythm permeates the movement. Some rhythmic events, according to the way they are written, can be executed differently in every performance of the work. Banding, for example, is used regularly throughout the movement. When accelerating, the lines will enlarge to three lines and when decelerating, the lines will contract back to one line. This is the banding that Mr Young speaks of in his article discussed above. Also, from performance to performance, the pitches, as in the second and third lines of the first section will differ, although only fractionally. In this section the pitch change with the slide glissando technique occurs over a number of written E's as opposed to moving from one pitch to another as seen in the first movement slide glissandi. The significance of the slide glissando at this point is that the pitches being played when slowly pulling the slide out will again differ from performance to performance as the player will not get the same pitch to sound every time. (See Ex. 7j)

Ex. 7j. Friedman, Solus, second movement, first three lines.



Ex. 7j. Continued.



Leon Dallen has a good definition of aleatoric elements in music:

The crux of an aleatoric composition lies in the elements predetermined by the composer and those left to the discretion of the performer. Any aspect of a composition can be fixed or free. For example, pitches can be notated in uniform symbols without rhythmic significance, in which case the performer determines the pitch of each duration. Likewise, tempos, dynamics, articulations, form, and even the medium can be described and the same in all performances, or unspecified and potentially different in each realization. The relative degrees of freedom and control vary in existing compositions from almost nil to almost total in both directions.<sup>4</sup>

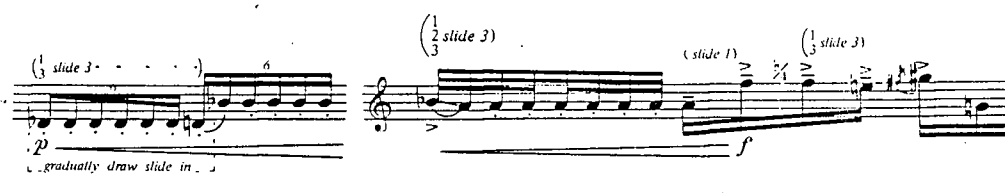
From a time standpoint the indicated rests are aleatoric in nature. These rests are shown by indicating the number of seconds of silence. The time spans (3" 4" 2"), however, should be proportionate. Consideration should be made according to the acoustical environment of the performance. If the hall has too much reverb the performer might consider waiting longer so that a sufficient amount of silence has passed. The time spans (3" 4" 2"), however, should be proportionate.

Returning to Example 7j and the second and third lines some attention should be renewed on the microtonal aspects of this particular section of the movement. The way this section was composed indicates that Friedman actually intends it to sound like a slide glissando with a  $\flat/4$  indication just showing the player where the pitch should be in relation to how many notes will be sounded before the actual written  $e^{\flat}$  is played nine notes later. In other words every four notes drop a quarter of a semitone. On the four written  $e^{\flat}$  the

player must stop moving the third valve slide. (See Ex. 7j)

One other microtonal event takes place in the second movement. It occurs on the first line of the second page. This particular line plus the two sextuplet figures just before are quite demanding, especially at a rapid tempo. What Friedman has accomplished in this section is a number of "false fingerings" that, when coordinated with the third and first triggers, allows the player to hit the right notes.<sup>5</sup> (See Ex. 7k)

Ex. 7k. Friedman, Solus, second movement, first line, second page.



The three episodes where the hand is used over the harmon mute offer no real difficulty to the player. In the first two examples the player simply lifts the hand off the mute at the point where WA is indicated. The third "WA," near the end of the piece requires that the player remove the hand from the mute simultaneously with the tongue striking the c'. (See Ex. 7l)

Ex. 7l. Friedman, Solus, first line, second page.



Friedman offers a realistic suggestion when discussing the pedal tones in his performance instructions. "Pedal tones are practical, however, the performer may wish to experiment with fingerings other

than those indicated."<sup>6</sup> His recommended fingerings are those that work best for him. Each player, as Friedman astutely acknowledges, finds different combinations easier for their needs.

The third movement, "Scherzando and Waltz," is quite light in nature. It is theatrical and indicates that the player should approach the waltz in an "exaggerated and theatrical" style. It is a particularly effective movement following what happened in the second movement.

A definition of "scherzando" is: "direction that an impression of lightheartedness is to be given."<sup>7</sup> Scherzo also means "joke" in Italian. Friedman is not only developing new technical aspects of the trumpet but also develops a player's interpretative skills by including a movement like "Scherzando and Waltz."

This movement should be approached with a sense of humour. For example, the basic theme given in the first measures (See ex. 7m) supplies the impetus of the whole scherzando section both at the beginning of the movement and also at the end where the scherzando concludes the movement. In the second measure of the theme the rhythmical placement of the two d<sup>♯</sup> on beats three and five is where the lightheartedness originates. It would be assumed, in the strict answer to the theme, found in measures 4 and 5, that the final two pitches would be the same -- which they are -- and that rhythmically they too would land on beats three and five. As is seen in example 7m, the first b<sup>b</sup> lands on beat three but the second b<sup>b</sup> lands on the second half of beat four. This witty answer, with obvious relationship to the first two measures has an even more witty episode in measures 6 and 7. The a<sup>♯</sup> and b<sup>b</sup> reappear, as if to place the b<sup>b</sup> in their right place, or at least in the same rhythmical placement as the d<sup>♯</sup> in measure 2.

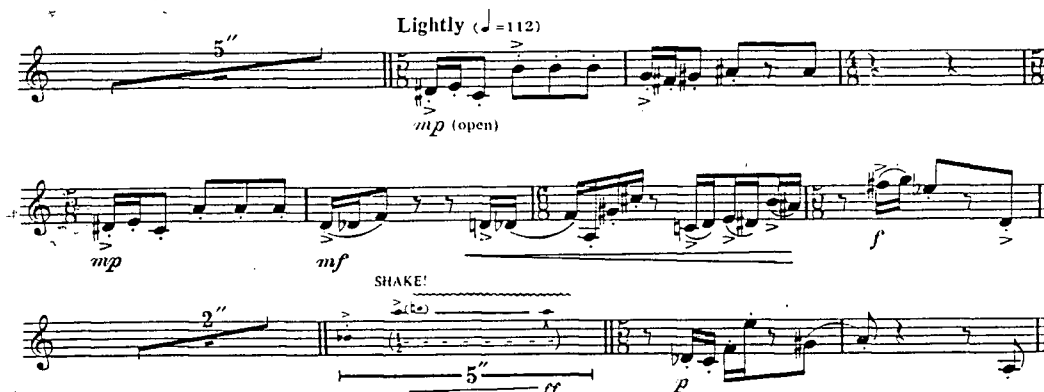
Curiously, the  $a'$  is now found on beat one rather than beat two. This whole first section requires perfectly executed rhythm so that these "joke-like" events are obvious to the listener.

Ex. 7m. Friedman, Solus, third movement, mm. 1-8.



In the final section of the third movement where the scherzando reappears at a different pitch level the events discussed with regard to the first five measures are expected to appear again. However, Friedman, in tongue-in-cheek response, eliminates the final two notes altogether. (Compare Ex. 7m to Ex. 7n)

Ex. 7n. Friedman, Solus, third movement, last three lines.



Two trumpet techniques that are becoming more common in contemporary trumpet literature are found in the third movement. The trills from  $f$  to  $g^b$  in measures 26-27 are the first event. These trills are not possible on the C trumpet unless the pedal note fingering for the  $f$  is used. The instrument is only able to play to

the low concert  $g^b$  which has all three valves depressed. To get the  $f$  with all three valves depressed the third valve trigger must be as extended as possible. The trill is difficult because the third valve slide has to move in and out for the two pitches. The lip is quite loose because the note is very low and thus with the slide moving in and out the trumpet does not feel very secure against the lip. (See Ex. 7o)

Ex. 7o. Friedman, Solus, third movement, mm. 26-27.



The second trumpet technique which is becoming more popular is found in the last line of the movement and is called a "shake." (See Ex. 7n) The shake is an effect that has been utilized in jazz music for many years and is becoming a more popular effect in contemporary trumpet literature. Smoker discusses the "shake" in his dissertation:

The effect of the shake is much like that of the trill. First popularized by jazz musicians, it is produced by shaking the instrument against the lips enough to produce the next overtone, usually higher. The speed of the shake is controlled solely by the movement of the hands and arms used to shake the instrument. An up and down movement of the instrument against the lips is often used to produce a slow shake; while and in/out movement against the lips is frequently utilized in the production of a fast shake. These may be used in combination also, the added mouthpiece pressure against the embouchure forces the lip to vibrate at a slightly faster rate. As a result, the highest harmonic is squeezed out.<sup>8</sup>

The waltz section of the third movement offers no real technical problems on the instrument. It, however, needs an overly dramatic performance to really be effective. Words like "very rubato" or "molto vibrato" and also "exaggerated and theatrical" are words Friedman used

in the indications at the beginning of the waltz section. Any attempt to play the waltz in a strict 3/4 time without rubato -- except the last seven measures -- will deem the section untheatrical. Some kind of programmatic thoughts may be useful in approaching the waltz section, particularly the last three lines of it which are devoted to only three pitches -- e' f' d#. From measures 62-70 the waltz loses its flow even though the metre is quite strict. It is as if two dancers are losing their step. Perhaps they are unable to go on as the rhythm gets more jerky with no real feeling of a strong downbeat. (See Ex. 7p)

Ex. 7p. Friedman, Solus, third movement, mm. 60-70.

The musical score for Friedman's Solus, third movement, measures 60-70, is presented in four staves. The first staff shows a melodic line with a 'poco dim.' marking and a 'p' dynamic. The second staff continues the melody. The third staff features a 'cresc.' marking and a 7-measure rest. The fourth staff shows a 10-measure rest with a wavy line indicating increasing intensity, marked with 'OW!', 'IGH!', and 'AGH!' and ending with 'AARRRGH!' and a 'fff' dynamic.

The next two lines which are rhythmically aleatoric have taken the time or the waltz feel right out of this "macabre" dance. It is, dramatically, a very long time -- 5'' -- before the scherzando reappears after the end of the waltz which has become "progressively louder, more frantic, and more insane." That the scherzando reappears in this lighthearted style adding to a bizarre sense of humour that is evident throughout the movement. (See Ex. 7p, following measure 70)

The fourth movement entitled "Fanfare" utilizes the concept of removing the second valve slide for the entire movement. The absence of the second valve slide creates a muting effect where the trumpet's tone is similar to that of a cornetto.

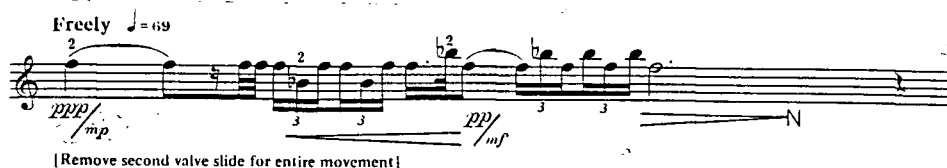
When comparing the slideless sound with the normal trumpet sound, the former is muted trumpet type of timbre, is less focused, especially in the lower register, has less loudness potential, has more flexibility of intonation (each slot of the deformed overtone series is characterized by wider than usual "lippable" range, causing considerable difficulty in attacking certain notes), and exits from a different part of the instrument, which may even be aimed in a different direction.<sup>9</sup>

There are some significant details that Friedman mentions in his performance instructions and within the body of the score. For example, the designated fingerings indicated in the score must be used in order to realize the composer's intended effect:

The false tones are used exclusively from the beginning of the movement to A. From A to B false tones and real tones are alternated. From B to C false tones are again used exclusively. At C real tones are employed.<sup>10</sup>

Throughout the movement there are many passages that have two dynamics indicated. For example, the first note of the movement has ppp/mp. This means that the player should play the note "mp" but because the note is a false tone produced through the second valve the resultant volume is only "ppp". (See Ex. 7q)

Ex. 7q. Friedman, Solus, fourth movement, first line.



Musically the false tones combined with the regular sound of the trumpet create the effect of two different instruments playing. The movement is basically a collection of fanfares which enables the composer to utilize the open-tubing technique. It is this technique which sustains interest in the movement.

## NOTES

<sup>1</sup>In measure 18, for example, the player must be able to hear the actual note before playing it; it is good practice to begin on measure 17 when working out measure 18 so that the intervallic relationship between the b and the g' seem obvious. In this first example (See Ex. 7e) the 2-3) remains depressed for the entire measure (the second and third valve are the regular fingering for a<sup>b</sup>). To play the g' in tune with these valves depressed the third valve slide (which is attached to the third valve), should go as far out as possible in order to bring the a<sup>b</sup> down a half step to g'. At the point where the a<sup>b</sup> is called for the slide is brought entirely "in," bringing the pitch up a half step to a<sup>b</sup>.

<sup>2</sup>Each different fingering combination, even if it uses the same two notes, as is the case with the g' a<sup>b</sup> in measure 18, and measures 20-21, requires similar practice because the distance the slide has to move out will be considerably different. The a'-g' 3 slide 3 is particularly awkward and the player should be cautioned that any over compensation in flattening will make an E natural sound. (See Ex. 7f)

<sup>3</sup>Gene Young, "Solus review" International Trumpet Guild 5, no. 2 (Feb. 1979): 17.

<sup>4</sup>Leon Dallen, Twentieth Century Composition (Dubuque, Iowa: Wm C. Brown Company, 1980), pp. 239-40.

<sup>5</sup>It is most challenging to get the pitches in tune, especially the a' to f'' on the top line of the second page. Slow practice in getting both triggers out is a necessity and the player must get the third valve trigger as far out as possible. This is rather awkward on the hand when executing the f'' as it requires the first slide all the way out. It was only by repeatedly playing the passage slowly and hearing the f'' before playing it that the accuracy was increased. The first f'' is quite sharp and thus, when playing the second f'' next to it, the pitch sounds a quarter tone flatter. The player should not make the two f'' in tune as it was not the intention of the composer. Also, in experimentation with the fingerings and slide indications it is impossible to get them to play in tune. If the player attempts to "lip" the second f'' up or the first f'' down, the player is certain to miss one of the notes. This is the reason Friedman placed the b/4 (quarter tone flat) between the two f''. (See Ex. 7k) The rest of the slide glissandi in this movement offer no similar difficulties. Slow practice will improve the pitch considerably.

<sup>6</sup>Stan Friedman, Solus (Nashville: Brass Press, 1978), p. 9.

<sup>7</sup>Arthur Jacobs, A New Dictionary of Music (Great Britain: C. Nichols and Company Ltd., 1973), p. 336.

<sup>8</sup>Paul Smoker, "A Comprehensive Performance Project in Trumpet Literature with a Survey of Some Recently Developed Trumpet Techniques and Effects Appearing in Contemporary Music" (D.M.A. dissertation, University of Iowa, 1974), p. 117

<sup>9</sup>Edwin Harkins, "Aspects of KRYL -- A Trumpet Piece," International Trumpet Guild 5 (October, 1980): 25.

<sup>10</sup>Stan Friedman, Solus (Nashville: Brass Press, 1980), p. 9.

## CHAPTER V

### JOHN ELMSLY'S TRIPTYCH FOR TRUMPET AND TAPE

John Elmsly composed Triptych in 1985 and later revised the composition in 1987. Elmsly is a graduate in mathematics and music of Victoria University of Wellington, where he studied composition with David Farquhar. From 1975 to 1978 he held a post graduate scholarship from the Belgian Ministry of Culture. In 1977 he was awarded a first prize in composition by the Royal Conservatory of Brussels where he studied with Victor Legley and in 1978 continued study in Liege with Henri Pousseur, Philippe Boesmans and Frederic Rzewski.

In 1981, after two years of teaching in London, he returned to New Zealand to take up the Mozart Fellowship at the University of Otago. This was followed by a further two years in London. In 1984 he joined the School of Music at the University of Auckland as a lecturer in composition. He has written works for diverse instrumental combinations from solo to full orchestra as well as electronic music.

Trumpet and tape has, over the past decade, become a popular addition to trumpet recitals. John Elmsly's Triptych offers trumpet players new challenges in contemporary music. Triptych offers as its most challenging aspect the synchronization of the trumpet and the tape or as it is in the sixth line of the Prelude the ability to avoid synchronization. (See Ex. 8c) Elmsly mentions in his performance notes that "synchronization with the tape is indicated where necessary,

otherwise in the outer movements the performer should feel free to treat timing indications as approximate."<sup>1</sup>

As is often the case in works for trumpet with prepared electronic tape the score does not indicate every event that takes place electronically. Instead, the score will give instruction regarding the tape's events only when it affects the trumpet player's entrance, completion of a phrase or section, or any other such structural event where synchronization is important.

The beginning of the "prelude" is an example of how the player must be fully conscious of timed events as fifteen seconds must transpire before the first trumpet entrance. (See Ex. 8a) Also, at the end of the first section (which takes place at the end of the fourth line) the player must be conscious of the one minute mark, as the  $f^{\#}$  resolving the  $g^b$  must be sustained for twenty seconds. If the player miscalculates they may not be able to hold the last pitches for the allotted time which is "till the tape is silent."

Ex. 8a. Elmsly, Triptych, first movement, first four lines.

The musical score is handwritten on four staves. The first staff begins with a treble clef and a key signature of one sharp (F#). Above the staff, it says "Tape begins 15''". The first measure is marked "ppp" and has a timing bracket of "ca 1 cm/sec" above it. The second measure is marked "mp" and has a timing bracket of "(5'')". The third measure is marked "p" and has a timing bracket of "(3'')". The fourth staff ends with a timing bracket of "(20'')". The second staff has measures with timing brackets of "5''", "2''", "3''", and "2''". The third staff has measures with timing brackets of "4''", "3''", "2''", and "2''". The fourth staff begins with a tempo marking "♩ = 96" and a dynamic marking "f". It includes a boxed section labeled "4 times". The score concludes with a dynamic marking "pp" and a timing bracket of "(≈ 1')". The final measure is marked "p" and has a timing bracket of "1'20''" above it, with the instruction "till tape silent" written above the staff.

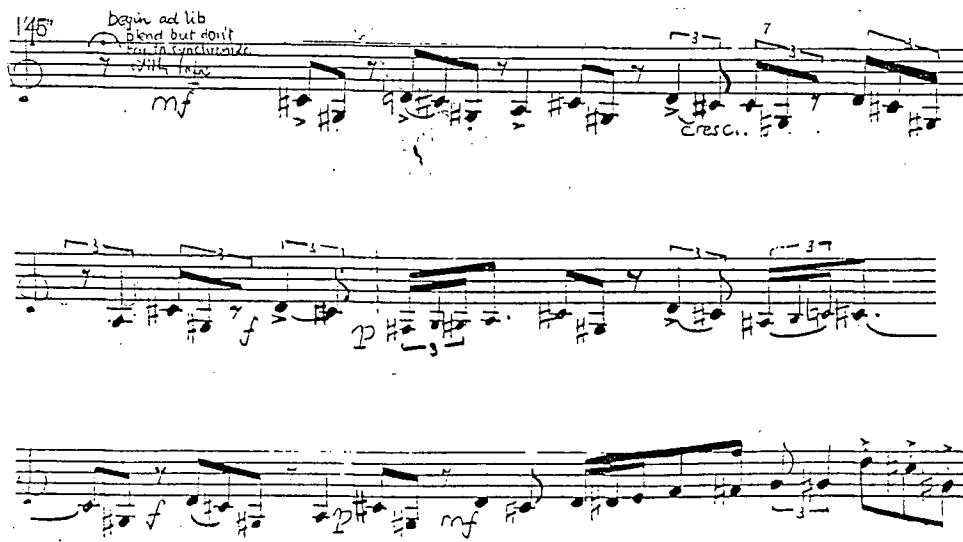
Sometimes writing in pitch or rhythmical detail can be helpful for the performer in this kind of music. For example, on the final sustained note (g<sup>b</sup>) the tape will play a pitch that will crescendo and decrescendo eight times. As can be seen by looking at example 8a this is not indicated but would be useful to the player. Similarly, after the general pause and the ten second tape alone, the tape, in this ten second episode repeats a triplet figure twenty times. (See Ex. 8b) For those who wish not to use a watch, the trumpet should enter after the twentieth group of triplets. In addition, the tape helps set the tempo in this B section as the first notes the trumpet has are also triplets.

Ex. 8b. Elmsly, Triptych, first movement, fifth line.



At the 1'45'' point the tape and trumpet have a fugue like idea where the tape plays the six note theme (See Ex. 8c ) and then the trumpet enters. The composer recommends the trumpet avoid synchronization. This episode is very dramatic as Elmsly makes brilliant use of the full register of the trumpet. The third and highest register does not play the entire six note theme but instead repeats D-C sharp six times. This section will definitely challenge the best players because of the extreme range and the loud volume at which it must be played.

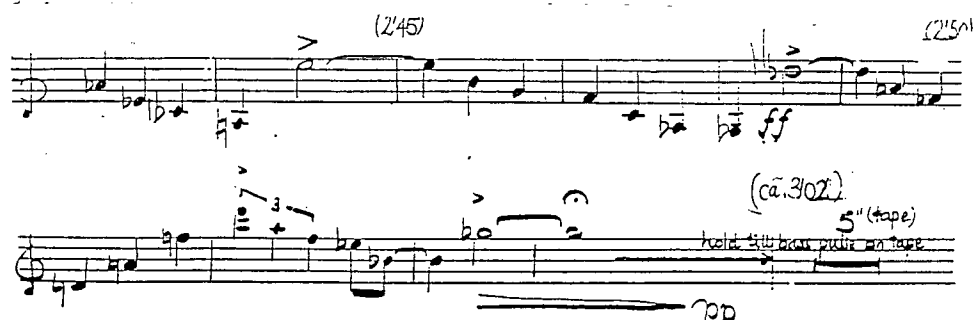
Ex. 8c. Elmsly, Triptych, first movement, lines 6-8.



Following this episode, the tape plays alone from 2'25" -- 2'35" building up to a flourish that brings the trumpet back in on a d<sup>'''</sup>. The trumpet then descends triadically stopping on the lowest note of each phrase, allowing for another flourish by the tape. Although a rest is not indicated in the score the composer has indicated that the trumpet must stop at the last note of each phrase. (See Ex. 8d) Perhaps the use of // would be useful in these three spots. Like the A section the B section also concludes on g<sup>b''</sup>, holding the note until a bass pulse is heard.

Ex. 8d Elmsly, Triptych, first movement, lines 11-14.

Ex. 8d. Continued.



The second A section reappears with similar ideas, although the pitch levels are different. It too concludes the movement on a  $g^{b--}$  at the same dynamic level "ppp" which the trumpet had started the movement.

The second movement, entitled "Allemand Courant", immediately draws attention to Baroque suites. An obvious comparison between Bach's Allemande and Courante and Elmsly's Allemand Courant is that they are polyphonic and that both compositions consist of only two voices. In addition, the set of English suites by Bach also begins with a Prelude followed by the Allemande and then the Courante. In the Bach suites each movement is separated from the other. However, Elmsly's Allemand Courant is one movement.

A Baroque model of the Courant is not detectable in the movement partly because the standard Courante is in 3/2 time. There is no indication that there is any three feel in the movement, outside of a 3/4 measure in the first repeat.

One instance of stylistic imitation of both the Allemand and Courante of the Baroque with the combined movement by Elmsly is the use of an anacrusis. This takes place in the tape part. (See Ex. 8e)

Ex. 8e. Elmsly, Triptych, second movement, mm. 1-7.

The events that best associate this movement with its Baroque counterpart are firstly, the first section being repeated and in the second ending its attempt at creating a modulation. In the Baroque era this modulation would go to the dominant key area. The movement has a definite "D" tonal centre, as is quickly noted by the tape's starting pitch and the trumpet's initial entrance. This entrance outlines both the D minor triad and also the D major triad. This shifting between the minor and the major triads (and key areas) is a feature of the movement. There is similar shifting between minor and major modes when the piece finally arrives in the dominant key area of A. (See Ex. 8f and Ex. 8g)

Ex. 8f. Elmsly, Triptych, second movement, mm. 29-33.

Ex. 8g. Elmsly, Triptych, second movement, mm. 16-28.

Typically, in the Baroque Allemand or Courante a dominant cadence is found at the end of the first section, which would be at measure 17. This dominant cadence event does not take place until measure 28. The expected event in a Baroque Allemand or Courante would have a cadence in the A key area occurring at measure 17 in the second ending. Instead, an  $e'$  (V/V) assumes importance for a few measures moving to a  $b''$  -- the dominant key area of E -- with a  $g'$  being played on the tape. Measure 20 hints at the A key area with the broken arpeggio (see Ex. 8g) but it is foiled by the sustained  $b''$  on the trumpet and the  $g'$  on the tape.

As Douglas Moore points out "the second half, which is usually longer, is concerned with the problems of finding its way back to the tonic. When this is achieved the piece comes to an end."<sup>2</sup> As soon as the A tonal area is established at measure 28 there is a dramatic silence and the immediate search for the D tonic area which does appear at the end of the movement.<sup>3</sup>

Harmonically, this movement is very much related to Baroque models in the simplest of terms. The tonic modulation is to the dominant key area but resolves back to the tonic at the end of the B section.

Measures 32 to the end are unusual because they are directly related to the beginning of the piece. Such distinctive thematic patterns in Baroque Allemandes and Courantes are rare. At first these last six measures appeared to be a return to the A section except at the dominant level. However, because there is other shared materials in the B section (See Ex. 8e and Ex. 8g) -- measures 5-7 and measure 25 -- it seems that Elmsly is trying to maintain a binary design in place and that the B section should be considered complete at the final cadence of the d'.

The final movement "Rondeau-Gigue," seems to combine certain elements of the traditional Rondeau and the traditional Gigue. In consultation with the composer, he stressed that the forms are, in the case of the second and third movements, a fusion of two types -- Allemand Courant in the second movement and Rondeau-Gigue in the third movement. The composer feels that the fusion of the rondeau and gigue is the most obvious.

The Rondeau and Gigue are movements often found at the ends of suites. The gigue feel is primarily attained by the feeling of triplet rhythms found in all sections of the movement -- sometimes in the

accompaniment and sometimes in the trumpet part. In most Mozart sonatas and concertos the rondo concluded the composition. The simplest rondo form would be ABACADA -- the A section would always represent the recurring section. For example, at the 1'10'', 2'56'' and 3'49'' point, which would all be designated A sections there are a number of recurring events. In each case the trumpet sustains a long note waiting for the tape to enter playing triplets as an accompaniment figure. In each of these A sections the triplet accompaniment figure is consistent. The 1'10'' A section and the 3'49'' A section also share the same thematic material although the final A section is at a higher pitch level -- starting on the dominant of A -- i.e. e''. Example 8h shows all three A sections where they originate.

Ex. 8h. Elmsly, Triptych, third movement, mm. 3-6, 47-48, 79-83.

The image contains three staves of handwritten musical notation. The top staff is marked with a treble clef, a key signature of one flat (B-flat), and a 3/4 time signature. It begins with a *pp* dynamic, followed by a crescendo leading to a *mf* dynamic. Above the staff, there is a handwritten annotation: (1'10'') (\* in tape (cont)). The middle staff is also in treble clef, B-flat key signature, and 3/4 time. It starts with a *p* dynamic, followed by a *cresc.* (crescendo) leading to a *f* dynamic. Above the staff, there is a handwritten annotation: 2'56'' (\*. tape figure). The bottom staff is in treble clef, B-flat key signature, and 3/4 time. It begins with a *pp* dynamic, followed by a crescendo leading to a *mp* dynamic. Above the staff, there is a handwritten annotation: (ca 3'49'') (\*). The notation includes various musical symbols such as notes, rests, and dynamic markings.

Although the middle A section at 2'56'' has a somewhat different theme it does share the aleatoric identity of the first A section as seen in the two examples below. (See Ex. 8i)

Ex. 8i Elmsly, Triptych, third movement, mm. 1-2, 46.

The musical score for Ex. 8i shows a trumpet part. It begins with a *pp* (pianissimo) dynamic. A bracket indicates a section where the tape begins, marked with a *f* (forte) dynamic. The tape section is enclosed in a box and contains a series of short, staccato notes. Above the box, it says "tape begins" and "ad lib. loud, short staccato, irregularly spaced; these or any sub-fragment, (rests ad lib)". To the right of the box, it says "continues" and "tape silent". Below the box, there is a section marked with a wavy line and the text "(x) two bursts in tape". This section is also enclosed in a box. To the right of this box, it says "as above" and "fill tape silent".

The B section at 1'44" is much more triplet-oriented in the trumpet part than the A sections. The accompaniment, as well, returns to the triplet rhythm near the end of the B section. The trumpet part is rhythmically awkward because of the constant shifting of duple and triple feel.

The C section -- *alla toccata* -- at 3'15" is a fairly brilliant section. The definition in the New Dictionary of Music of the word *toccata* is "an instrumental piece, usually for one performer and usually consisting of a rapid movement exhibiting the player's touch."<sup>4</sup> This is most evident as can be seen in example 8j with the rapid triplets in the trumpet part.

Ex. 8j. Elmsly, Triptych, third movement, mm. 62-67.

The musical score for Ex. 8j shows a trumpet part. It begins with a *mp* (mezzo-piano) dynamic. Above the first few notes, it says "(ca. 3.15)" and "alla toccata". The score is filled with rapid triplets, indicated by the number "3" above the notes. The dynamic changes to *mf* (mezzo-forte) towards the end of the section. The word "cresc." (crescendo) is written below the first few notes.

The movement offers a few aleatoric events which are quite straightforward as the composer has indicated "ad lib. loud, short staccato, irregularly spaced; these or any sub-fragment, (rests ad lib.)." In both examples, as seen in example 8i, the player stops when the tape is silent. Synchronization with the triplets in the tape is the most challenging aspect of the movement. The ability to combine duple meter with the triplet ideas on the tape needs careful attention.

NOTES

<sup>1</sup>John Elmsly, Triptych for Trumpet and Tape (Auckland: J. Elmsly, 1989), p. 1

<sup>2</sup>Douglas Moore, Guide to Musical Styles (New York: W. W. Norton and Company, 1962).

<sup>3</sup>From an endurance standpoint, the first section played for the second time, is particularly difficult. The synchronization between the tape and trumpet is most significant in this middle movement and quite straightforward.

<sup>4</sup>New Dictionary of Music.

## CHAPTER VI

### LUCIA DLUGOSZEWSKI'S SPACE IS A DIAMOND

#### FOR UNACCOMPANIED TRUMPET

Lucia Dlugoszewski's Space is a Diamond is an interesting contribution to the literature because of its use of new trumpet techniques and also its manner of notating certain musical events.

Lucia Dlugoszewski was born in Detroit in 1931. While studying in New York, she studied composition with Edgard Varèse and Felix Salzer. Distinguished awards include the Tompkins Literary Award for Poetry in 1947 and the National Institute of Arts and Letters Award in 1966. In addition to her numerous instrumental works she has invented more than one hundred percussion instruments including the "timbre piano."

Space is a Diamond, composed in 1970, is rarely performed and has received a less than favourable review in the International Trumpet Guild. Many of the requirements of the music go well beyond the technical capabilities of even the finest players. Perhaps the work is a little before its time. Nonetheless, it is assumed that, because Gerard Schwarz -- recognized as one of America's great musicians -- recorded the work and also wrote performance notes, the composition is one of worth to the trumpet literature. Perhaps Schwarz's look to the future is quite optimistic about what players will be able to achieve.

In the introductory comments on page 5 discussion takes place

about one of the most common technical requirements of Space is a Diamond -- "virtually all extreme high register passages are to be performed softly with the valves slightly depressed."<sup>1</sup>

Pedal tone playing is also a common feature found in the Dlugoszewski:

The particular "pedal tones" called for in Space is a Diamond are the easiest and the most practical on the B-flat trumpet. The lips must be able to vibrate the pitch with a wide aperture and very little pressure.<sup>2</sup>

The fingerings for the pedal tones are also included in the performance notes.

The notation indications, with regard to mute changes, are quite unique and are discussed in detail in the performance notes which are quoted here:

A mute symbol in green indicates "mute in", in red "mute out." In passages with many close successive mute changes the left end of the mute symbol is to be taken as the point where the mute change occurs.<sup>3</sup>

Ex. 9a, Dlugoszewski, Space is a Diamond, Part 2, second line.



The o and + indications modify both harmon and plunger mutings. As applied to the harmon mute, + means lightly covering the opening of the mute with the hand (fingers), while o means removing the hand. As applied to the plunger; + means closing the bell of the trumpet with the plunger; o means opening the plunger, although not totally, so that the sound still hits the plunger a little.<sup>4</sup> (See ex. 9b)

Ex. 9b. Dlugoszewski, Space is a Diamond, Part 3, first three lines.

The harmon mute is to be used at times with the stem completely in, at other times with the stem completely out (as indicated). Indeed, it is suggested that the performer use two harmon mutes, one with the stem in, the other without stem. during fast moving passages marked o+o+o, the opening and closing need not necessarily be totally co-ordinated with pitch changes.<sup>5</sup> (See Ex. 9c)

Ex. 9c. Dlugoszewski, Space is a Diamond, Part 4, line 7.

A small table with all the mutes on it set up within reach of the player will facilitate mute changes. Generally the left hand will be used to insert or withdraw the mutes. It is important that a minimum amount of extraneous noise be made during mute changes.<sup>6</sup>

Part V is a particularly significant movement with regard to quick mute changes and the constant colour change that the composer is looking for on one pitch -- c#<sup>7</sup>. Shown below is Example 9d, the first

four lines of the movement.

Ex. 9d. Dlugoszewski, Space is a Diamond, Part 5, first four lines.

The glissando should not be confused with the Friedman slide glissando. The glissando in Space is a Diamond are played with valves half way down. (See Ex. 9e)

Ex. 9e. Dlugoszewski, Space is a Diamond, Part 1, fifth line.

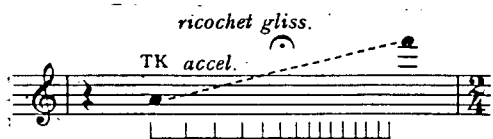
There are also glissando that require the player to add the flutter-tongue. The rolling of the tongue is added but the composer urges that the glissando should be as smooth as possible. (See Ex. 9f)

Ex. 9f. Dlugoszewski, Space is a Diamond, Part IV, sixteenth line.



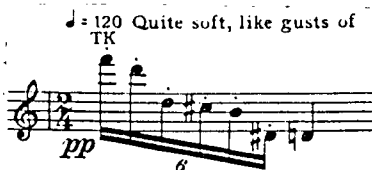
A third type of glissando is the "ricochet glissando" and "is produced by taking a half valve position and, after the initial attack, 'glissandoing' upward with the tongue touching various pitches while getting faster as the pitch rises."<sup>7</sup> (See Ex. 9g)

Ex. 9g. Dlugoszewski, Space is a Diamond, Part IV, nineteenth line.



The standard notational symbol of TK indicates double tonguing. In the Dlugoszewski, however, it is required "as fast as possible. It is used in two ways: (a) over rapid passages using different pitches (see ex. 9h) and (b) over single pitches reiterated in as-fast-as-possible double tonguing. (See x. 9i) Such TK passages are notated with three cross lines."<sup>8</sup>

Ex. 9h. Dlugoszewski, Space is a Diamond, Part I, sixth line.



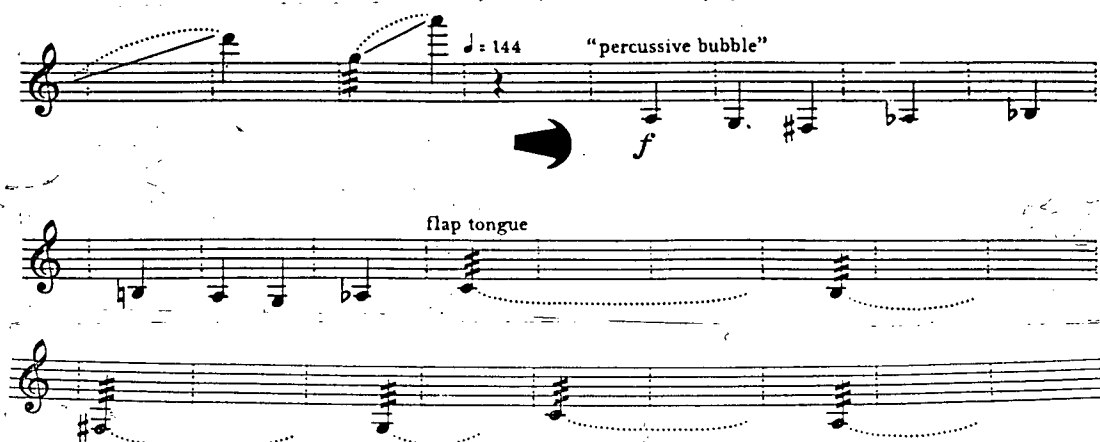
The player should note that a fluttertongued note will be notated with four lines. (See Ex. 9i)

Ex. 9i. Dlugoszewski, Space is a Diamond, Part III, lines 3-4.



The "percussive bubble" is created by hitting the mouthpiece with the hand while certain valve combinations are pressed down. (See Ex. 9j)

Ex. 9j. Dlugoszewski, Space is a Diamond, Part IV, lines 11-13.



The "flap-tongue" is one of those techniques a beginner might do and the teacher will strongly urge the student to stop.

It is produced with a rather "wide" embouchure, sending the air through the instrument, without normal tonguing, but instead thrusting the tongue forward and upward against the upper teeth and lips, thereby stopping the air and making a percussive sound. This can be done at various speeds and dynamic levels.<sup>9</sup> (See Ex. 9j)

The "whistle-tone" is a thin whistle sound produced by (a) (preferred by the composer) whistling the desired pitch through the teeth into the instrument without forming an embouchure and only the slightest pressure against the mouthpiece; or (b) producing a high, thin "whistle-tone" with a very tight embouchure but minimal pressure, in a sense like a harmonic.<sup>10</sup>

Ex. 9k. Dlugoszewski, Space is a Diamond, Part VI, last three lines.

whistle tone

fff f p

ord. ffff p ord. ffff pppp

whistle tone

flap tongue sfz p

Apart from traditional tempo and metronome indications, the present work also uses a notation in which an arrow (along with the appropriate metronome markings) delineates the time space to which the duration is to be applied.<sup>11</sup> (See Ex. 91)

Ex. 91. Dlugoszewski, Space is a Diamond, Part I, first line.

100

gliss

pp 1 2 3 4 5 6 7

All glissandi very smooth and unaccented.

Another unique notation is the dotted line that is used to indicate the uniting of a number of fluttertongued pitches. When this is done, only the first note should be articulated, with the rest of the pitches slurred. (See Ex. 9m)

Ex. 9m. Dlugoszewski, Space is a Diamond, Part III, fourth line.

TK 6

5

mp f ppp fff

Finally, a technique where the player must sing one pitch and play a note -- often different -- simultaneously. This is a particularly difficult technique on the trumpet as the mouthpiece is not big enough. This effect is a form of multiphonics. (See Ex. 9n)

Ex. 9n. Dlugoszewski, Space is a Diamond, Part V, lines, 10-11.

Stems up = sing notes  
Stems down = play notes

mf

(fast)  
+o+o+o

mf

## NOTES

<sup>1</sup>Lucia Dlugoszewski, Space is a Diamond (Newton Centre, Mass.: Margun Music, Inc., 1977), p. i.

<sup>2</sup>Ibid.

<sup>3</sup>Ibid., p. ii.

<sup>4</sup>Ibid.

<sup>5</sup>Ibid.

<sup>6</sup>Ibid.

<sup>7</sup>Ibid.

<sup>8</sup>Ibid.

<sup>9</sup>Ibid., p. iii.

<sup>10</sup>Ibid.

<sup>11</sup>Ibid.

## CHAPTER VII

### CONCLUSIONS

The compositions discussed in this document feature a wide range of technical difficulties and demands. The style of the music from the Fantasy for B-Flat Trumpet by Malcolm Arnold to Space is a Diamond by Lucia Dlugoszewski exhibits the struggle between traditional and experimental music. The trumpet world stands embroiled in a struggle reminiscent of the invention of the keyed trumpet and the valved trumpet. Even in the early 1800s the powerful trumpet guilds battled against Weidinger's keyed trumpet (with some success) only to see the valved trumpet come into vogue shortly thereafter.

Preparing this program of music encourages the trumpet player's mind to concentrate more deeply on what the music is saying and how it is achieved. The Fantasy for B-Flat Trumpet by Arnold is prepared in a similar manner to any traditional trumpet solo, such as the Haydn or Hummel concertos. Certain structural events are significant to the player and the music. Because the work is harmonically and melodically straightforward the musical tonal goals are easily comprehended.

Initially, Henderson's Variation Movements, 1967 has tonal goals that are less straightforward than those of the Arnold. By looking at some of the tonal goals in the composition, like the recurring cadence formula in the first movement or the final note of the fifth movement,

a more insightful performance will be possible. The demands of technical skill, especially lip flexibility, make this piece a great challenge.

Historically, Friedman and Dlguoszewski should be considered pioneers in exploring new ideas that will expand the capabilities of the trumpet and the trumpet player. The use of pedal tones, aleatoric events, open-tubing technique, slide glissandi, and tremolos in Friedman's Solus offer new potentials for musical inspiration for composers.

Trumpet and electronic tape, as demonstrated by John Elmsly's Triptych, is an excellent combination. The balance between the trumpet and the tape is far easier to achieve than the balance between the trumpet and the piano. The different variety of sounds available to the tape composer is more of a complement to the timbre of the trumpet. Imperative to the successful performance of this type of music is the trumpet player's total familiarity with the electronic part so that synchronization, when required, is achieved.

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THE UNIVERSITY OF BRITISH COLUMBIA

SCHOOL OF MUSIC

Recital Hall

Sunday, April 21, 1991

2:30 p.m.

DOCTORAL SOLO RECITAL\*

=====

EDWARD BACH, Trumpet

Fantasy for B-flat Trumpet (1969)

Malcolm Arnold

Variation Movements (1967)

Robert Henderson

Moving and in a Singing Style

Very fast

Fast and Marked

Slow and in a lyric style

Fast and Rhythmic

Triptych for Trumpet and Tape (1987)

John Elmsly

Prelude

Allemand Courant

Rondeau - Gigue

Solus (1975)

Stan Friedman

Introduction

Furtively

Scherzando and Waltz

Fanfare

\* In partial fulfillment of the requirements for the Doctor of Musical Arts degree with a major in trumpet performance.