

**THE TRANSMISSION OF IDEAS IN CONTEMPORARY  
MUSIC THEATRE THROUGH CONTEMPORARY  
TROMBONE TECHNIQUES.**

by  
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I certify that this project is entirely my own work, except where I have given fully documented references to the work of others and that the material contained in this project has not previously been submitted for assessment in any formal course of study.

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## CONTEMPORARY MUSIC THEATRE AND THE TROMBONE

The combination of sound and visual elements in the performance of music is a long established tradition. Ancient iconographical sources reveal that early civilizations used music as part of ritual, where the music, action and spectator reactions were closely bound within the framework of religious celebrations and pageantry<sup>1</sup>. Contemporary music theatre is a descendant of these events requiring both visual and auditory attention. It has evolved through an integration of elements taken from ritual, folklore, theatre of the absurd and oriental theatre such as Japanese *no drama* in which the detail in the components of gesture and delivery is more vital than the narrative thread<sup>2</sup>.

The subject matter which composers have drawn upon as a basis for contemporary music theatre works is varied but can generally be viewed as representing an individual's perception, thoughts and understanding of the nature of art and culture in contemporary life<sup>3</sup>. In the process of a composer's thoughts about musical issues being combined with their thoughts on social issues, the inner artistic and social environments are often fused. Composers of contemporary music theatre have developed various strategies involving both musical and extra-musical elements which aid the conveyance of their ideas. The novel musical elements include the exploration of tone colour through new instrumental usages and the supplementary

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<sup>1</sup>Reginald Smith Brindle, The New Music: the Avant-garde since 1945 (London: Oxford University Press, 1975), 146.

<sup>2</sup>Paul Griffiths, Modern Music: the avant-garde since 1945 (London J.M. Dent and Sons, 1981), 248.

<sup>3</sup>Eric Salzman Twentieth-Century Music: an Introduction (Englewood Cliffs: Prentice-Hall, 1974), 196.

stimuli have included costumes, props, lighting effects and the staging of events designed to provoke audience participation. The inclusion of instructions for these theatrical effects encourages the notion that any musical performance which would not achieve the effect the composer intended it to achieve unless it is viewed as well as listened to can be classified as a contemporary music theatre work.

The modern large-bore tenor trombone has enjoyed a healthy popularity amongst composers of contemporary music theatre as an instrument valuable for expressing their ideas. The primary quality which makes the trombone an ideal vehicle for the conveyance of theatrical art is its flexibility in a great number of characteristics, such as unlimited pitch control, large dynamic and pitch ranges, and the availability of a palette of varied tone colours.

Other factors which may have encouraged composers to write for the trombone are its capacity for theatrical effects resulting from the sometimes expansive movements of the slide, its similarity to the human voice and its possible robust quality which has been used exhaustively to make the instrument a striking force. It is in this area that the directional quality of the trombone has been used extensively and as early as in the choreographed movements of the instrumentalists during the bigband swing era. Despite favourable characteristics possessed by the trombone it had been an instrument neglected by composers who contributed to chamber and solo repertoire (which includes contemporary music theatre) until the 1960's when it was seen by some more adventurous musicians as an unchartered area ripe for exploration.

## CONTEMPORARY TROMBONE TECHNIQUES

The Yugoslavian trombonist/composer Vinko Globokar (b.1935) and the American trombonist Stuart Dempster have inspired and developed many techniques which have expanded their instrument's expressive qualities. A majority of these contemporary trombone techniques are utilized in works either commissioned or composed by them. One area which has received concentrated attention has been the relationship between the trombone and the human voice. The association existed at least as early as the seventeenth century when the scientist Mersenne wrote that the trombone should cultivate a vocal style<sup>4</sup>, and led to the members of the trombone family being named after the vocal registers into which their respective ranges fall, the Soprano, Alto, Tenor, Bass and Contra-bass.

The trombone may acquire more than simply a vocal style through the use of mutes and vocally produced sounds being channelled along the pipe and out of the bell which, under these circumstances, has become an extension of the throat. These techniques allow the trombone tone colour to resemble that of the human voice to a degree that speech-like sounds and words can be pronounced through instrumental sound with reasonable accuracy and clarity. One of the best devices used to realize this technique is the plunger mute which is usually a plunger as used by plumbers to unblock drains. When this mute is held in a closed position against the bell the sound becomes buzzy like a stopped note, but when it is tilted to an open position the sound becomes convincingly vocal. The area between the plunger and the bell has effectively become the

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<sup>4</sup>Marin Mersenne, 1588-1648. Harmonie Universelle, trans. Roger E. Chapman (The Hague: Nijhoff,1957), 341-43.

oral cavity of the trombone throat and its manipulation produces speech-like textures and shapes. Within the framework of these vocal inflections words can be articulated by the combination of both buzzed and vocal vowel sounds and consonants.

'Buzzed vowels' are created by the trombonist simultaneously producing a buzzed lip sound and altering the shape of the human oral cavity as if saying the nominated vowel. Consonants are achieved by employing articulations which vary in terms of tongue position and speed at the onset of a note. Many of these consonants have vowels attached to form pronounceable syllables. The most commonly used articulations are the 'tu' and 'du' variety. 'Ku' is another possibility which is commonly featured in alternation with the 'tu' attack in the double or triple tonguings used to ensure precision in rapid passages. The 'tu', 'du', and 'ku' articulations can be used to suggest consonants other than 't', 'd', and 'k' when aided by the use of 'bent tones'. As a form of glissando, 'bent tones' occur when the pitch of a note is sharpened or flattened not by movement of the slide, but by altering the position of the lower jaw, causing the lip to buzz higher or lower than allows the pipe to comfortably resonate. This effect also occurs when the F-trigger attached to many modern large-bore trombones is depressed half way causing a slight change in pitch due to extra tubing being partially opened<sup>5</sup>. This technique, known as the 'half-valve effect', produces a tone similar in colour to one which is experienced when playing the 'fake notes' which exist between low 'E' and pedal 'Bb' on the tenor trombone. These pitches may be buzzed into the trombone at the sacrifice of attaining a clear singing sound as the instrument does not possess the physical characteristics which would enable it to resonate naturally in this range.

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<sup>5</sup>Stuart Dempster, The Modern Trombone: a definition of its idiom (Berkeley: California University Press, 1979), 19.

The fact that the pitch patterns involved in speech are not organized by semitonal relationships makes them difficult to be accurately represented in the Western musical language. As the pitch control mechanism of the trombone consists of a continuous sliding pipe, the performer is at liberty to produce the smaller than semitone intervals, or microtones, present in speech.

The vocabulary of the trombone is enriched with harmonic possibilities through singing whilst playing, multiphonics, and the manipulation of the intensity of specific partials in the harmonic series implied by a note. When the singing voice is combined with the sound resulting from the buzzed lip, three or four-note chords can be heard if the intonation is precise. Audible beats resembling fluttertonguing appear if the interval between the played and sung note is less than a tone. Another method of producing multiphonics is the split tone, where two adjacent partials will sound if two embouchures are formed by the trombonist acting as if playing the note in the middle of two consecutive harmonics. Other multiphonic effects occur when vowel shapes formed by the oral cavity are changed slowly above a fairly low steady note. This effect can also be created by opening and closing the hand over the stem of a wa-wa mute, which is also useful in its ability to make an 'u-a' vowel sound as well as dampening the tone, thereby eliminating the lower partials. The instruments' tone may be altered further by projecting the sound through a large variety of electronic objects including the electric fan<sup>6</sup>.

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<sup>6</sup>David Baker, Contemporary Techniques for the Trombone (New York: Charles Colin, 1974), 302.

A technique which secures theatrical as well as musical interest is the use of mouthpieces designed for non-brass instruments. Multiphonic effects which are easy to produce although not always predictable can arise when double reeds (such as for the bassoon) are inserted into, or single reeds (such as for the bass clarinet) are attached in place of the trombone mouthpiece. In his theatre piece *BRTB* (1974), David Cope asks for several different types of mouthpieces to be tried and eventually rejected, leaving the trombone mouthpiece as the only suitable accessory to play the short tune at the end of the work<sup>7</sup>.

Percussive devices may also be used as extra auditory and visual aspects of a performance. Whilst playing, the trombonist may tap the foot, shuffle, dance, hit the bell with a fingernail or mute, or do anything from an infinite number of actions giving rise to percussive sounds. Other effects specific to the trombone include the 'velar click', where the tongue is brought down away from the back of the upper teeth whilst inhaling<sup>8</sup> and the 'pop', where a strong puff of air is instantaneously cut off with the tongue<sup>9</sup>.

Methods of tone production which may have a theatrical aspect are the 'harmonic glissando' on the same note, the 'inhaled buzz', 'water tones' and instrument deformation. When

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<sup>7</sup>David Cope, *BRTB* (Nashville: Brass Music, 1974)

<sup>8</sup>Stuart Dempster, *The Modern Trombone: a definition of its idiom* (Berkeley: California University Press, 1979), 43.  
The word 'velar' is used in linguistic texts to describe speech sound articulations which require the tongue to approach or touch the soft membrane forming the roof of the mouth behind the hard palate. R. Hartmann, and F. Stork, *Dictionary of Language and Linguistics* (London: Applied Science Publishers, 1972), 248.

<sup>9</sup>Giancarlo Schiaffini, *The Trombone: increasing its technical and expressive capacities* (Milan: Ricordi, 1982), 27.

executing the 'harmonic glissando' the trombonist must move the slide as far as indicated whilst attempting to keep the initial pitch with the buzzed lip. This will cause the starting note to recur during the manouvre as the length of resonant tubing travels over several partials. This technique is facilitated by an increasing abundance of alternate positions from middle to high register notes. The 'inhaled buzz' requires the lips to vibrate whilst inhalation takes place instead of the usual exhalation that features in conventional playing. 'Water tones' can produce a diverse range of tones which vary according to the amount of water held by the instrument and the angle at which the slide is held in relation to the ground. Sounds emitted under these conditions may include gurgling, when either the slide is at an acute angle to the ground or a large quantity of water is used, which gradually becomes sparse crackling as either the slide is levelled to a near parallel position to the ground (holding it any higher invites the water to gush down the trombonist's throat) or the amount of water is decreased<sup>10</sup>. Instrument deformation allows amusing sounds and unusual tone colours through performance on the various sections of the trombone following disassembly.

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<sup>10</sup>id.

## THE USE OF CONTEMPORARY TROMBONE TECHNIQUES TO CONVEY MEANING IN CONTEMPORARY MUSIC THEATRE

Key works of Contemporary Music Theatre which feature the trombone in a theatrical context include *Sequenza V* (1966) by Luciano Berio (b.1925), Vinko Globokar's *Discours II* (1967-68), and *General Speech* (1969) by Robert Erikson (b.1917). The extra-musical elements present in these works serve to represent the meaning contained in the musical elements in a less abstract form.

Berio's *Sequenza V* for solo trombone is a work of contemporary music theatre in that it includes instructions for costume, gesture, stage setting, lighting, and performance techniques all designed to help the performer portray Grock, the European clown famous for constantly questioning his seemingly futile actions and efforts. In an introductory note by the trombonist Stuart Dempster, who commissioned the work, it is specified that a spotlight is to pick up and follow the trombonist from the moment of entry onto the stage to a medium height stool in centre stage. The costume consists of a white tie and tails. The performer is instructed not to acknowledge the audience but to stand facing the front in the centre stage position, pause and then gaze upwards as if in search of imaginary prey. The trombonist then raises the trombone as if taking aim, plays the first note as if shooting and immediately lowers the instrument again. Arrows in the score are used to indicate the raising and lowering of the trombone, the speed of these movements being indicated by the proportional notation. These 'gunshot' effects are also heard on the second and fourth pitches. The fifth time the trombone is raised all the motions involved in playing a note should be executed, including taking a breath, but instead of playing the

note the performer is instructed to pull his<sup>11</sup> face away from the instrument and give the audience a phony grin. This clowning gesture, along with the bare stage (the stool being the only prop), the modest lighting (a single spotlight) and the lack of acknowledgement of the audience all serve to create the impression that Grock is in an empty hall, performing alone and questioning the situation.

One of the questions Grock (as represented by the trombonist) may be addressing by performing *Sequenza V* is the very purpose of playing such an incredibly challenging work. The piece was written in collaboration with Vinko Globokar and therefore many of the effects the trombonist is asked to produce require a virtuosic and specialist skill in contemporary performance techniques. The atmosphere these effects create is one of effort or struggle as the trombonist tackles passages where instrumental sounds are combined with vocal sounds with the goal of obtaining a similarity of attack and colour between the two. Feelings of desperation are aroused when the performer audibly inhales air from the instrument while singing and the constant use of a metal plunger mute (either open, partially closed or fully closed over the bell) suggests suffocation. Tension is created audibly by occasionally rattling the mute inside the bell of the instrument with a fast movement and the large dynamic capacity of the trombone is used to produce stark contrasts, sometimes between individual notes. Effort is suggested visually by passages of fast and continuous movement of the slide indicated as a graph pattern in the score where instrumental sounds are produced without concern for the movement of the slide (see example 1).

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<sup>11</sup>The sung parts of the work fall into a vocal range suitable for a tenor or bass voice.

## Example 1

Example 1 is a musical score for a trombone. It features a staff with a waveform representing the sound. Above the staff, there are dynamic markings (1=soft as possible, 7=loud as possible) and a section labeled 'inhalation' with '(audible)' written below it. Below the staff, there are markings for 'slide movement' and 'plunger mute open or closed'. The score includes various notes and rests, with some notes marked with circled numbers (3, 4, 6, 7, 2). The waveform shows a series of peaks and valleys, indicating the amplitude of the sound over time.

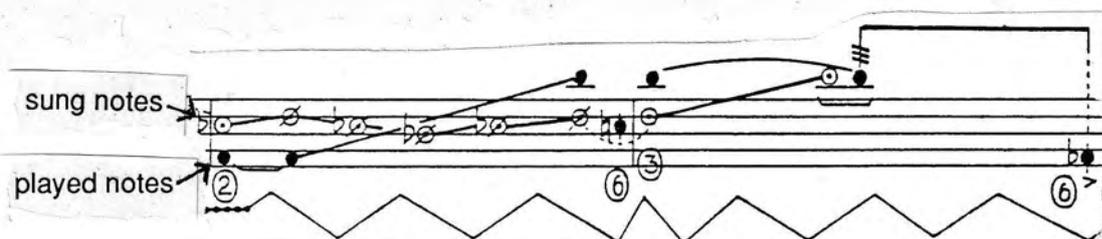
It is after this laboured section that the performer utters vocally a bewildered 'WHY?' which signals the more relaxed beginning of the second section of the work as if the futility of the situation has been realised. Much of the opening of this section is played with a 'breathy sound' which can only be produced by the existence of a loose or completely effortless relationship between the trombonist's embouchure and instrument. This calm mood does not last long as tension is once again introduced through techniques such as singing and playing simultaneously, fluttersong, harmonic glissando on the same note, and double or triple staccato. As the tension increases to a near a painful level in each of the two sections the question 'WHY?' appears in the instrumental colour. This is achieved through the use of the buzzed vowel technique featuring the vowel sounds 'u', 'a', and 'i' (see example 2 a,b & c).

## Example 2 a,b &amp; c

Example 2 consists of three parts, a, b, and c, each showing a musical staff with notes and a waveform below it. Part (a) shows notes with dynamic markings (2 and 3) and a waveform with a peak labeled (u a i). Part (b) shows notes with dynamic markings (5 and 7) and a waveform with a peak labeled (u a i). Part (c) shows notes with dynamic markings (4 and 5) and a waveform with a peak labeled (u a i). The waveforms show the amplitude of the sound over time, with peaks corresponding to the notes.

The work glides to a passive end as the vocal and instrumental sound blend onto the same pitch at a soft dynamic. Berio's *Sequenza V* signalled a new attitude towards the trombone as a solo instrument. Some combinations of techniques included in the work, such as the simultaneous use of glissandi, 'wa-wa' mute effects, and singing whilst playing (see example 3), are possibilities available only to the trombone and therefore the piece can be considered as the first work written for the trombone that cannot be played on any other acoustic instrument.

### Example 3



Many works of Vinko Globokar have made the trombone grunt, shriek, neigh, croak, bark, bellow, pant, snore, spit, howl, whisper, groan and cough. These sounds are produced through a variety of embouchures, fluttertonguing, singing and playing, harmonics and muting with a large range of objects. In *Discours II* Globokar has concentrated on making the instrument speak<sup>12</sup>. The piece, based on a French text describing the similarity between the spoken language and playing the trombone, may be performed by either five

<sup>12</sup>The English translations of the French word 'discours' are given as 'speech' or 'discourse'. B. Atkins, A. Duval, and R. Milne, Collins Roberts French-English, English-French Dictionary (Glasgow: Collins, 1984), 213.

trombonists or only one live performer with a pre-recorded tape. The quintet version is more satisfying theatrically as it enacts a debate between five personalities. These characters are portrayed through the combination of various performance techniques and physical behaviour. Globokar believes that it is through this cooperation of the mental and physical energies involved in performance that intensity of sound is achieved<sup>13</sup>.

The metaphorical conversation is animated by the mimicking of human expression in both individual and social contexts. Etiquette is observed by the trombonists rarely 'speaking' simultaneously, the ensemble only uniting for brief confrontations or agreements, or the parts exchange ideas in forms suggestive of questions and answers. Performance techniques contribute to the body sounds created by the five conversationalists in their interaction. Laughter, exclamations, gibberish and angry sounding tones are heard as well as salivatory noises arising from the build-up of water in the slide ensured by the instruction that the trombonists are not to empty their water keys during the performance.

The section of the text 'mais il ya aussi une analogie' [but there exists an analogy] is realised instrumentally as follows (see example 4):

#### Example 4

The image shows a musical score for a trombone part. It consists of a staff with a treble clef and a key signature of one sharp (F#). The notation includes a series of notes and rests, with some notes marked with 'x' above them, indicating plunger mute effects. A bracket on the right side of the staff is labeled 'plunger mute open or closed'. Below the staff, the text '(c) mais aussi une analogie il ya' is written in a handwritten style.

<sup>13</sup>Paul Griffiths, Modern Music: the avant-garde since 1945 (London: J.M. Dent and Sons, 1981), 231.

Each syllable is pronounced by the techniques noted in table 1

**TABLE 1** Techniques used to express words in *Discours II*<sup>14</sup>

WORD	ISOLATED SOUNDS	PERFORMANCE TECHNIQUE(S)
mais	mais	<p>speak normally outside the mouthpiece</p> <p>blow caused by suddenly stopping the bell with the plunger</p>
ilya	i y a	<p>spoken through the instrument</p> <p>short inhaled breath sound</p> <p>play an 'E flat' with very little tone (breathy sound) with an open plunger</p>
aussi	au ssi	<p>play 'C sharp' with the plunger three-quarters closed</p> <p>spoken normally with the mouth away from the mouthpiece</p>
une	u ne	<p>play a high 'F sharp' with a closed plunger</p> <p>blow produced by suddenly closing the slide</p>
analogie	a na lo g ie	<p>sung vowel with certain amount of instrumental sound added</p> <p>play a low 'F' with an open plunger</p> <p>play an 'A flat' with very little tone (breathy sound) with the plunger three-quarters closed</p> <p>blow into the instrument imitating the consonants 'sch'</p> <p>very short spoken vowels</p>

Robert Erikson's *General Speech* for solo trombone, written to fulfil a commission by Stuart Dempster, is based on General Douglas MacArthur's retirement speech given in 1962 at West Point. The work requires the trombonist to be costumed with a military hat, dark glasses, shoulder pads, white satin gloves, medals and other appropriate insignia

<sup>14</sup>Derived from an 'Explanation of symbols' section attached to the score of *Discours II*. Vinko Globokar, *Discours II* (Frankfurt: Henry Litoff's Verlag, 1969).

painted with fluorescent paint. After entering in a 'military fashion' the performer takes position behind an opulent lectern (upon which two smallish American flags are mounted) and delivers excerpts taken from General MacArthur's speech through the use of both vowel and consonant sounds produced through the trombone. Sections of the speech are printed in small lettering above the music. Above these, word abstractions consisting of the vowels and consonants intended to determine the shape of the oral cavity for each note have been included in large lettering. Rests and repeated letters indicate the length and stress each sound is allocated. This piece addresses the relationship between speaking and playing the trombone by the bell acting as an extension of the throat.

The extra-musical elements in the work, including the costume, special lighting, props and use of gesture serve the purpose of suggesting a very powerful military personage. This is done theatrically by the performer sticking out the chest to show off medals and giving the audience an intense stare whilst leaning forward in one of the pauses which occur throughout the piece. The movements of the slide (dictated by the notes prescribed in the score) are suggestive of expressive arm movement as if to emphasize points considered important by the speaker. A larger-than-life effect is created when the trombonist suddenly rises to full height after performing the first sentence of the text with bent knees hidden behind the lectern. The content of the text is reflected by instructions for expressive poses such as 'HARD STARE SURVEY AUDIENCE' (see example 5) when the significance of the West Point 'DUTY, HONOR, COUNTRY' motto is explained and 'PREPARE FOR SOLEMNITY AND SELF PITY' (see example 6) before the retirement is announced. The musical elements introduce a farcical quality, where speech is distorted to somewhat comical lengths and pleasantly avoiding seriousness and dignity that such an occasion of retirement should demand.

## Example 5

DOO-TEE YON-OR CUNT'TREEEEEE THO(\$)zuh THUHRee 4

DUTY HONOR COUNTRY THOSE THREE

POCO VIBR 1/2 VALVE VOICE NORMALE

HARD STARE SURVEY AUDIENCE

SPLIT

SUDDENLY RAISE BODY TO FULL HEIGHT

1/2 VALVE NORMALE

*f* *f* *ff* *f* *mp* *mf* *mp* *mf* *pp*

5"

## Example 6

TOODAYeee MOKS \* MYE FINA ----LROLL CCALLuh WITHeeoo

TODAY MARKS MY FINAL ROLL CALL WITH YOU

16" 20"

DRINK, FILL GLASS, DRINK POSE ETC. PREPARE FOR SOLEMNITY + SELF PITY

BODY QUIVER (FAKE)

VIB

(SLIDE CREEPS BUT EACH PITCH STEADY)

VIB

RAISE UP. LEAN FORWARD. REACH OUT.

3"

*mp* (intense) *mf* *f*

Due to the possibility of various timbres the trombone is the optimum instrument to convey the exaggerated pride and extroversion of the personage<sup>15</sup> as well as the subtleties of vocal inflection. Its low range further suggests a male voice and makes vowel harmonics an attractive possibility as far as contemporary trombone techniques are concerned (see example 7).

<sup>15</sup>These qualities are well documented in General Douglas Mac Arthur's autobiographical Reminiscences (New York: Crest, 1964), 480-84.

**Example 7** (all five vowels are used in this example)



Interesting multiphonic effects occur when vowels are slowly changed above a steady note, causing different partials of the harmonic series the sound for each vowel (see example 8). This technique is best realized in the range extending from low 'B flat' down the interval of a fourth to 'F' in which much of *General Speech* has been written<sup>16</sup>.

**Example 8**



'Bent tones' resulting from the use of the 'half-valve effect' (see example 9) and 'fake notes' (see example 10) aid in the pronunciation of consonants<sup>17</sup>. They also encourage the production of microtonal intervals.

<sup>16</sup>Stuart Dempster, The Modern Trombone: a definition of its idiom (Berkeley: California University Press, 1979), 10.

<sup>17</sup>Stuart Dempster, *idid.*, 17.

## Example 9

HHAL-LOW DWUR - DZUH \*

HALLOWED WORDS

BREATHY

1/2 VALVE NORMALE

## Example 10

FARUM

FROM

(FAKE)

Consonants are produced when notes are articulated with the tongue in the same position it would be in if one were vocalizing the sound. To emphasize the similarity between instrumental and vocal colour some consonants are produced by the voice and some vocal vowels are sung through the instrument in addition to the instrumentally realized speech. In the context of this piece, bent tones, fine gradations of pitch change, and marked alterations in pitch result in microtonal intervals which represent the microtonal fluidity of speech (see example 11).

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Example 11

CAPTE--NNZOOHO-- LE THE NEIGHSHUNZZ DESTINNY, IN THEIRHHA----NDZ UH MO----- MEN, DUH

CAPTAINS WHO HOLD THE NATION'S DESTINY IN THEIR HANDS THE MOMENT THE

The musical notation for Example 11 is a single staff in bass clef. It begins with a dynamic marking of *f*. There are two instances of '(FAKE)' written above the staff. The first '(FAKE)' is above a note with a slur. The second '(FAKE)' is above a note with a slur, followed by a dynamic marking of *p* and then *f*. There are also several upward-pointing arrows above the staff, likely indicating accents or breath marks.

Dynamic markings, a velar click (see example 12), the use of 'ahem', belch, and cough sounds, and an instruction to 'whisper' (see example 13) imply the stresses, moods, and impurities the human process of speech involves.

Example 12

RALLEEYING POYN \* T

RALLYING POINT VELAR CLICK

The musical notation for Example 12 is a single staff in bass clef. It includes a dynamic marking of *f* followed by *p*. A star symbol (\*) is placed above a note, with the label 'VELAR CLICK' written above it. The word 'POINT' is written above the staff. The notation ends with a dynamic marking of *f*.

Example 13

WEAR---LDUVCHAIN---JUH

WORLD OF CHANGE 2<sup>nd</sup>

The musical notation for Example 13 is a single staff in bass clef. It features a dynamic marking of *f* followed by *p*. The word 'WHISPER' is written below the staff with a series of vertical lines underneath it. The word 'IMMOBILE' is written in a box above the staff. A '2<sup>nd</sup>' marking is placed above the staff. The notation ends with a dynamic marking of *f*.

Berio, Globokar, and Erikson have all relied heavily upon the relationship between the trombone and the human voice in their contemporary music theatre works. The physical actions involved in realizing the numerous contemporary trombone techniques proffer to suggest effort in *Sequenza V*, intensity in *Discours II*, and expressive bodily gestures in *General Speech*. The success of these works lies in the fact that they are not saturated in meaningless displays of technical virtuosity. Rather the skill of the performer is used to evoke atmospheres such as the mock grandeur in *General Speech* or the tension, confusion, and eventual relaxation aroused in *Sequenza V*. By not viewing the performance of these works, the impact of the composer's message is dramatically reduced. The extra-musical elements of these works provide concrete frames of subject matter within which the more abstract messages of the music may be applied.

#### **A NEW PIECE OF MUSIC THEATRE FOR THE TROMBONE**

The accompanying piece of music theatre is a work where the introduction of contemporary techniques is used to suggest the process of adaptation and change which motivation has the capability of exercising upon an existing situation. The development of the musical elements represents the idea that when these characteristics are combined with knowledge from past experience quality of life can be improved. The theatrical elements apply this concept to a specific context, making it less abstract. Entitled *Bye I'm Going*, the piece signifies the departure of a young Czech man<sup>18</sup> from a life of apathy to a life of achievement.

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<sup>18</sup>The voice part of the composition falls into a tenor or bass range.

The work, although performed without breaks, can be divided into three sections symbolizing the speeches given by the monarchs of the Czech regions of Slovakia, Moravia, and Bohemia who were attending a banquet to celebrate the nomination of their kingdoms as the ideal fairytale settings. The first consists of a narrative introduction followed by the performance of the 'song' for trombone and piano in which Dušan, the king of Slovakia spoke of nature which is ordered. The second is the imitation of a band arrangement of a Moravian folksong or 'dance' by the solo trombonist where Elulália, the queen of Moravia spoke of dance which is inspired. In the final section, 'colourmusic', the trombonist reinterprets the opening song without the supportive role of the piano as Ruprecht, king of Bohemia spoke of colour which can be both ordered and inspired.

The stage setting enables the present and the past to be revealed simultaneously. A table with a sleeping drunk seated with back to audience and the trombonist and pianist seated awake across it facing the audience is to occupy the front portion of one side of the performance area and three mannequin kings in extravagant and colourful clothing are situated in the back portion of the other side of the stage. A piano is positioned behind the table and a cassette player in the vicinity of the Elulália mannequin queen. A small, well-lit table on which stands a one litre transparent container capable of holding water is located near the edge of the performance area in front of Ruprecht. Speakers may be placed in any location that satisfies the condition that performers and audience can hear the sounds they emit.

The trombonist rises (with instrument in hand) as if to go to the bathroom but as crossing the stage notices the kings. The trombonist approaches Dušan cautiously. When he senses that the king is harmless he becomes eager to brawl with him.

Quickly appeased by the mannequin's lack of retaliation he casually removes a hat from Dušan's head and puts it on his own, but it appears to be more irritable than comfortable. Upon searching the interior of the hat he discovers the manuscript of a song. Meanwhile the pianist has taken position at the keyboard as a recording of the sound of a Slavic voice delivering a narration based on Czech history is played. As the speech concludes the pianist and trombonist perform the song after which they turn to each other and shrug shoulders. They begin to return to the table. The pianist, arriving first, sits but the trombonist hesitates remembering the purpose of former rising, and crosses the stage once again. This time Elulália is confronted and loses her vest to the trombonist. In the vest pocket he finds a cassette which he promptly plays on the nearby cassette player and does a little dance, after which the solo trombone arrangement of the folksong contained on the recording is performed.

By this stage it should be obvious that the trombonist has left the pianist and the drunk. He hurriedly moves to meet Ruprecht, the final king, from whom he acquires a tie. In a chest at the Ruprecht's feet (if the mannequin has feet) he finds a chest which contains glasses of coloured water. The are carefully removed from the chest and placed on a small, well-lit table in full audience view, after which the solo arrangement of the original 'song' is performed. After the final note has been played the trombonist notices that there are no more mannequins to meet, the drunk and the pianist are asleep at the table and he is wearing new clothes so he exists with trombone.

The basis of the 'song' about nature is a setting of a poem where notes assigned to letters are used to develop melody as a function of the frequency of appearance of individual letters in the poem. Harmony is derived through the combination of letter notes to form both chordal and contrapuntal textures. The solo part is written in a vocal-like

range and with very little markings indicating expression or style. The trombonist is expected to interpret the melodic line by by changing registers and using techniques other than contemporary trombone techniques.

The 'dance' is the Moravian folksong *Až půjdete přes pole* [When you go through the fields] first presented in a simple mountain band arrangement whose texture is subsequently mimicked by the solo trombone. The different layers of sound present in the band arrangement are achieved trombonistically through the use of a variety of techniques. These include singing-whilst-playing and split tone multiphonics, bent tones, vowel sounds and their resultant harmonics, harmonic glissandi, and percussive devices produced by foot tapping, bell hitting, velar clicks and pops as well as fluttertonguing (produced by rolling the tongue in an identical manner as the Czechoslovakian language demands for the pronunciation of the letter 'r').

The 'colourmusic' is a synthesis of the two sections which precede it. The trombonist is to appear to be using what he has learnt through performing the 'song' and 'dance' to create a new work based on colours achieved through water sounds, multiphonic effects and microtonal intervals. Glasses of coloured water are poured into the slide section of the trombone to produce the water sounds. Audible tone colours are paralleled with these visual colours by each hue representing a different contemporary technique. When the coloured waters are mixed at the conclusion of the work these techniques are combined. The addition of yellow water results in effects such as overblowing water sounds, trills and fluttertonguing all suggestive of the decoration of a sound. Singing-whilst-playing is used in conjunction with blue water and the plunger mute is used when green water is added to the mixture. Red water is intended to appear to be causing microtonal passages where the trombone slide is divided into twelve instead of the usual seven positions involved in tonal playing. This distinction is indicated in the score by markings of 'n=7' for sections where the octave is divided into twelve intervals and 'n=12' for the microtonal

sections with twenty-one intervals<sup>19</sup>. This forms a scale with twenty-one approximately equidistant intervals within what was previously an octave<sup>20</sup>. In the final three bars of the work the names of the three monarchs are stated instrumentally by mixing the techniques the colours seem to have inspired (see table 2).

**TABLE 2** Techniques used to express words in *Bye I'm Going*

WORD	ISOLATED SOUNDS	PERFORMANCE TECHNIQUE(S)
Elulália	e	breath-attack (no tongue articulation), half-closed plunger
	lu	three-quarters-closed plunger, breath-attack, tenuto
	lá	open plunger, breath-attack, tenuto
	li	closed plunger, breath-attack
	a	sustain previous pitch and open plunger fully
Dušan	du šan	three-quarters-closed plunger, 'du' articulation open plunger, downward glissando encompassing a microtonal interval
Ruprecht	rup	open plunger for articulation but close immediately after attack, fluttertongue, purse lips and allow a short burst of air escape as tongue protrudes
	recht	plunger fully-closed for articulation but open immediately after attack, fluttertonguing, thuck

<sup>19</sup>The symbol 'n' is used to designate the number of positions the trombone slide is divided into.

<sup>20</sup>See appendix 1 for a chart containing position numbers required to play the notes on a slide divided into twelve positions forming twenty-one intervals.

**APPENDIX 1** N=12

Trombone slide position chart for 'n=12' producing a microtonal scale with twenty-one intervals within an 'octave'. In the sections of the work based on this scale, flat and sharp signs are separated by an interval equal to that which separates a flat from a natural and a natural from a sharp.

POSITION	1	2	3	4	5	6	7	8	9	10	11	12
1.												b
2.												#
3.												b
4.												b
5.												#
6.												b
7.												b
8.												#
9.												b
10.												b
11.												#
12.												b

(positions) 12 11 10 9 8 7 6 5 4 3 2 1 12 11 10 9

1. 7<sup>7</sup>

2. 7<sup>7</sup> #

3. 7<sup>7</sup> 4 7

4. 7<sup>7</sup> 4 7

5. 7<sup>7</sup> # 7

6. 7<sup>7</sup> 4 7

7. 7<sup>7</sup> 2 7

8. 7<sup>7</sup> # 7

9. 7<sup>7</sup> 4 7

10. 7<sup>7</sup> 4 7

11. 7<sup>7</sup> # 7 4

12. 7<sup>7</sup> 4 7 #

7<sup>7</sup> # b 4 # b 4 # b 4 # b 4 # b

8 7 6 5 4 3 2 1 9 8 7 6 5 4 3

A 12-staff musical score. Each staff begins with a treble clef and a key signature of one sharp (F#). The notes and accidentals are as follows:

Staff	1	2	3	4	5	6	7	8	9	10	11	12
1.	b°											b°
2.	#°											#°
3.						#°					b°	
4.				b°							b°	
5.					b°					#°		
6.						#°					b°	
7.							b°					b°
8.								#°				#°
9.									b°			b°
10.										b°		b°
11.											#°	#°
12.												

A single staff of music with notes and accidentals: #°, b°, b°, #°, b°, b°, #°, #°, b°, b°, #°, #°, b°.

A single staff of music with numbers: 2, 1, 7, 6, 5, 4, 3, 2, 1, 5, 4, 3, 2, 1.

Handwritten musical score for 12 staves. The notation includes various notes with accidentals (sharps, flats, naturals) and stems. Above the first staff, there are four groups of notes:  $b_2$ ,  $b_2$ ,  $4_2$ , and  $\#_2$ . The notes are distributed across the 12 staves in a specific pattern.

A single staff of music containing a sequence of notes with accidentals:  $4$ ,  $\#$ ,  $b$ ,  $4$ ,  $\#$ .

A single staff of music containing a sequence of numbers: 6, 5, 4, 3, 2, 1, 3, 2, 1, 4, 3, 2, 1, 4, 3, 2, 1.

**APPENDIX 2** BYE I'M GOING

The author's own work of music theatre, *Bye I'm Going* for trombone, piano and three mannequin monarchs.

## BYE I'M GOING

Notes regarding the stage set-up and extra-musical performance procedures are included in the main body of the paper and will not be repeated in this appendix. An explanation of the symbols used by the author to designate various contemporary trombone techniques for which no known standard notation exists is included overleaf.

**TEXT FOR THE TAPED SLAVIC VOICE:** to be read as the performers prepare to play the 'song'.

*Queen Elulalia of Slovakia and King Dusan of Moravia joined King Ruprecht of Bohemia for a grand food festival at his castle.*

*The reason for the celebration was this:  
their lands had recieved nominations for being ideal fairytale settings.*

*As a symbol of gratitude, each monarch was expected to speak at some length on what they considered to be the most notable feature of their land.*

*Dusan spoke of nature, Elulalia spoke of dance and Ruprecht spoke of colour.*

$\overbrace{x^{\text{ca}}}$   
c  
c  
c

j.v.

s.v.

VOICE or V.C.

1 2 3  
[ [ [

0 --- (x)

[ [ [ [ [ ] ] ] ] ]

(x)  
(T)

(x)  
(c)

m

⇒

#  $\overbrace{x}$   
x

[ d\*  
e ]

o

- Proportional notation.  $x$  is duration in seconds.

- Short pause

- Long pause

- Jaw vibrato

- Slide vibrato

- all vocal sounds indicated on the separate staff are to be produced through the instrument.

- where necessary slide positions are indicated above notes and should definitely be used to produce 'bent tones'.

- move the slide to the position indicated by the bracketed note keeping the pitch of the original note

- slide movement (no buzzed-lip instrumental sound), accidentals at the beginning of the bracket apply to all subsequent notes within the bracket.

- thuck

- velar click

- short 'mm' sound made in throat with mouth closed

- purse lips and allow a short burst of air to escape as tongue protrudes

- stems up = tap bell or mute with fingernail or ring  
stems down = tap foot

- shape mouth as if pronouncing the nominated vowel for the duration of the crossed note above (make no vocal sound).

- breath attack, begin the note without the aid of tongued articulation.

[<sup>o</sup>/<sub>o</sub>] split

N=7

N=12



(x)

(B)

+  
o

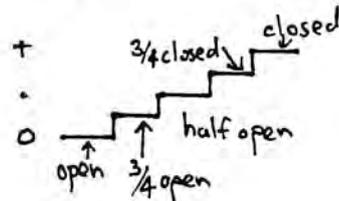
- split tone multiphonics
- slide divided into usual seven positions.
- slide divided into twelve positions.
- slide held parallel to the ground.
- slide pointing down as far as practical.

- slide held in the normal position.
- arrows through these symbols indicate gradual movement to the next position indicated.

- sustained blowing continued from previous note
- sustained blowing joining two notes.
- short puff (blow) into instrument.

- wa-wa and plunger mutes either closed (+) or open (o)

NB the plunger may be used in five positions:



15.ml RED

- add fifteen millilitres of red water by pouring into the slide section via the mouthpiece

EMPTY RED

- water is to be emptied into the container on the table.

TROMBONE + PIANO

SONG

(♩ = 144)

TRB. *[LIGHT]* *mp* *8va*

PIANO *p* *ped.* *8va* *6* *ped.*

*mf* *p* *8va* *mp* *mf* *pp* *p* *ped.* *ped.* *ped.*

*mf* *p* *pp* *ped.* *f* *p* *sff* *pp*

Musical score for the first system. It consists of a piano staff (top) and a grand staff (middle and bottom). The piano staff begins with a treble clef, a key signature of one flat (B-flat), and a 4/4 time signature. The grand staff has a bass clef and a key signature of one flat. The music includes various notes, rests, and dynamic markings. A 'ped 5' marking is present below the grand staff. The system concludes with a double bar line.

Musical score for the second system. It features a vocal line (top) and a piano accompaniment (bottom). The vocal line is in a soprano register (8va) and is marked '[LIVELY]'. The piano accompaniment is in a bass clef and includes a forte 'f' dynamic marking. The system concludes with a double bar line.

Musical score for the third system. It features a vocal line (top) and a piano accompaniment (bottom). The vocal line is in a soprano register (8va) and includes the lyrics 'ac - - - cel - er - an - do - -'. The piano accompaniment includes a 'cres' (crescendo) marking and a fortissimo 'fff' dynamic marking. The system concludes with a double bar line.



The image displays a handwritten musical score for piano, organized into three systems. Each system consists of a vocal line and a grand staff (treble and bass clefs).

- System 1:** The vocal line begins with a rest, followed by a melodic phrase in 4/4 time. Dynamics include *mf* and *[LIGHT]*. The grand staff features a complex accompaniment with a *f* dynamic, a *ped* (pedal) marking, and a triplet of eighth notes. The bass line includes a sixteenth-note figure.
- System 2:** The vocal line continues with a melodic line in 3/8 time. Dynamics include *f* and *p*. The grand staff features a *p* dynamic, a *ped* marking, and a *tr* (trill) marking. The bass line has a four-note chord.
- System 3:** The vocal line continues with a melodic line in 4/4 time. Dynamics include *p*. The grand staff features a *p* dynamic, a *ped* marking, and a *tr* marking. The bass line has a four-note chord.

The score is written in black ink on white paper, with various musical notations including clefs, time signatures, notes, rests, dynamics, and performance instructions.

Musical score system 1, measures 1-4. The system includes a vocal line and two piano accompaniment staves. The vocal line starts with a half note G4, followed by quarter notes A4, B4, and A4. Dynamics are marked *mf*, *p*, *mf*, and *mp*. The piano accompaniment features a right hand with eighth notes and a left hand with quarter notes. Pedal markings are present in the left hand. An *8va* marking is shown above the right hand staff.

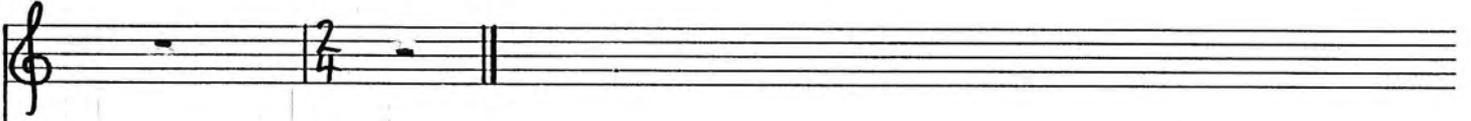
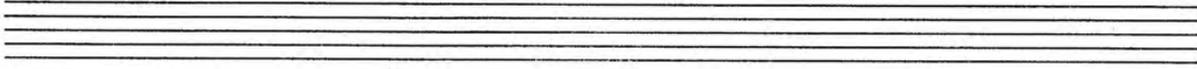
Musical score system 2, measures 5-8. The system includes a vocal line and two piano accompaniment staves. The vocal line has a half note G4, followed by a quarter rest, then quarter notes A4, B4, and A4. Dynamics are marked *mf* and *mf*. The piano accompaniment features a right hand with eighth notes and a left hand with quarter notes. Pedal markings are present in the left hand. An *8va* marking is shown above the right hand staff.

Musical score system 3, measures 9-12. The system includes a vocal line and two piano accompaniment staves. The vocal line has a half note G4, followed by quarter notes A4, B4, and A4. Dynamics are marked *sub.p*, *cres*, *cen*, *do*, and *f*. The piano accompaniment features a right hand with eighth notes and a left hand with quarter notes. Pedal markings are present in the left hand. An *8va* marking is shown above the right hand staff.

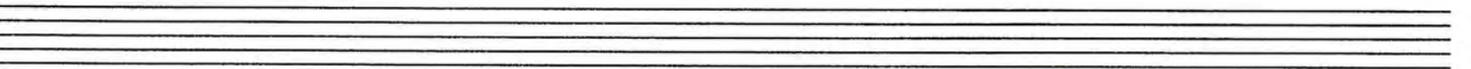
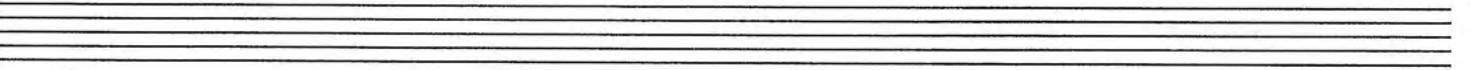
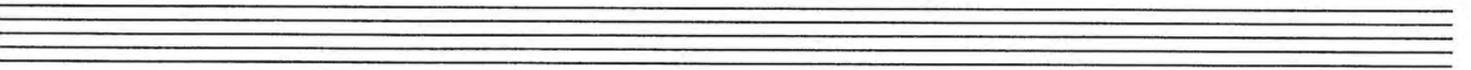
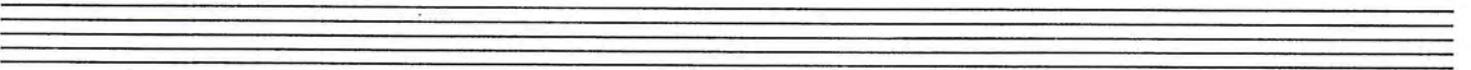
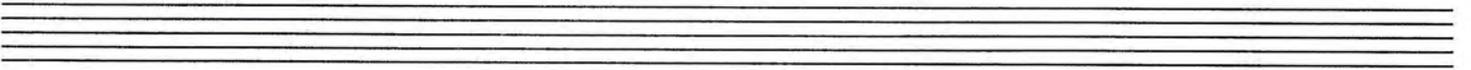
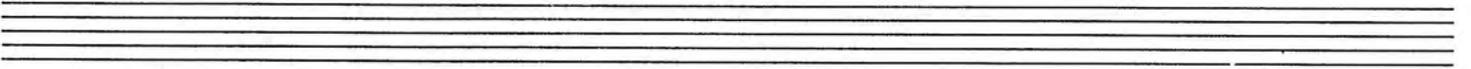
mf de-- cres-- cen -- do -- pp [HEAVY] *sva<sub>7</sub>*  
mf de-- cres-- cen -- do. PPP  
ped

(sotto voce) p  
ped

ped



A piano score consisting of two staves. The upper staff has a treble clef and a key signature of one sharp (F#). It contains a melodic line with notes G4, A4, B4, C5, and D5, with a slur over the first four notes. The lower staff has a bass clef and contains notes G3, A3, B3, and C4, with a slur over the first three notes. A 'ped' marking is written below the bass staff. The time signature is 2/4. A double bar line is present after the first measure.



**TAPE** MORAVIAN FOLKSONG 'Až půjdete přes pole'

(♩ = 120)

Clarinets in B♭

2 Cornets in B♭

Trombone

Euphonium

Triangle  
Bass Drum

*f*

*f*

*f*

*f*

*f*

Cl.

Crnets.

Trb.

Euph.

Trgl.  
B.dr.

Musical score for measures 1-8 of a brass section. The score is written for five parts: Clarinet (Cl.), Cornets (Crnts.), Trumpets (Trb.), Euphonium (Euph.), and Trombone (Trgl. B.dr.). The key signature is one sharp (F#) and the time signature is 4/4. The music features a rhythmic pattern of eighth and quarter notes, with a triplet of eighth notes in measure 2. Measure 6 contains a fermata over a quarter note. The parts are arranged in a standard brass section layout.

Musical score for measures 9-10 of a brass section. The score is written for five parts: Clarinet (Cl.), Cornets (Crnts.), Trumpets (Trb.), Euphonium (Euph.), and Trombone (Trgl. B.dr.). The key signature is one sharp (F#) and the time signature is 4/4. The music continues the rhythmic pattern from the previous system. A double bar line is present at the end of measure 10, indicating the end of the section.

TROMBONE DANCE

TROMBONE

VOICE

7<sup>ca</sup> 5<sup>ca</sup> 3<sup>ca</sup> fast as pass.

mp p mp

1<sup>ca</sup> mp

TRB.

3<sup>ca</sup> 2<sup>ca</sup> 1<sup>ca</sup> 4<sup>ca</sup>

1 2 3 4 5 6 1 2 3 4 5 6 1 2 3 4 5 6 6 5 3 4 2 1

p (T) (T) (T) (T)

March Tempo

TRB.

VC.

f ff

Scour audience as if expecting some reaction.

TRB.

VC.

p (T) pp f

Examine and insert wa-wa mute

p ff

TRB.

VC.

pp mf

Remove mute and discard towards Ruprecht

TRB. *f* *p* *sv.* *j.v.* (c) (c) (c) (c) *p* *split*

VC. *f* *p* *split* *Insert cup mute*

TRB. *f* *p* *split* *ff* *p* *ff*

VC. *f* *mp* *j.v.* *mp* *mp* *mp*

TRB. *f* (T) (T) *flt.* *mp* *split*

VC. *f* *mp* *mp* *mp*

# TROMBONE COLOURMUSIC

**N=7** Tempo to allow lyrical style

**TROMBONE** 15ml. YELLOW

**TRB.**

**TRB.**

**TRB.** 15ml. BLUE

**VOICE**

**TRB.** EMPTY CUP MUTE

**TRB.**

**TRB.**

TRB. 7 Remove MUTE | 15ml. RED

N=12

TRB. mf ff mf

VC. [ \* \* \* ]

TRB. f mp ff mp

VC. [ \* \* \* ]

ju. wavy sv. f decrease.

TRB. pf pp ff

EMPTY almost all RED

N=7

TRB. fp f fff p pp

N=7

ffff with open water key

TRB. Retrieve and Wa-Wa MUTE

pp ff

TRB. to to to to+to+to

cresc.

TRB. Remove wa-wa mute | Examine, then drink CLEAR water

fff s.v.



TRB.

Staff 1: Trumpet (TRB.) in treble clef, 2/4 time. Notes: G4 (f), A4 (3), B4 (3), C5 (p), D5 (p), E5 (p), F5 (p), G5 (p). Dynamics: f, 3, 3, p, p, p, p, p.

Staff 2: Percussion staff with a rhythmic pattern of eighth notes.

TRB.

Staff 1: Trumpet (TRB.) in bass clef, 6/4 time. Notes: G2, A2, B2, C3, D3, E3, F3, G3. Dynamics: mp.

VC.

Staff 2: Voice (VC.) in bass clef, 6/4 time. Lyrics: "EMPTY WATER".

TRB.

Staff 1: Trumpet (TRB.) in bass clef, 3/4 time. Notes: G2 (pp), A2 (gliss.), B2, C3, D3, E3, F3, G3. Dynamics: pp, gliss., ff, ff, (T), (X).

VC.

Staff 2: Voice (VC.) in bass clef, 3/4 time. Lyrics: "u a u e".

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