SOUND MODIFICATION TECHNIQUES IN
SELECTED FLUTE REPERTOIRE
SINCE 1966
VOLUME II

by
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MAJOR REPertoire ANALYZED IN VOLUME I

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TABLE OF CONTENTS

VOLUME II

MAJOR REPERTOIRE ANALYZED IN VOLUME I

✓ Bartolozzi, Bruno. Collage.
✓ Cantrick, Robert. Three Mimes (No. II, III).
✓ Dick, Robert. Afterlight.
✓ Ferneyhough, Brian. Cassandra's Dream Song.
✓ Holliger, Heinz. Lied.
✓ Levy, Burt. Orbs with Flute.
✓ Meekel, Joyce. The Shape of Silence.
✓ Ostendorf, Jens-Peter. Multiphonia.
✓ Purcell, Patrick. It Crew and Crew.
✓ Sollberger, Harvey. Riding the Wind IV.
✓ Takemitsu, Toru. Voice.
# Table of Contents

**PREFACE.** A Brief Note to the Performers  
page 4

**MIME 1.** SPOON'S PAGE  
Solo mime for singer in eight movements  
page 5

**MIME 2.** HALF-TIME SHOW  
Solo mime for flutist in eight movements  
page 33

**MIME 3.** EVERY GOOD BOY DOES FINE  
Duo mime for singer and flutist in six stanzas  
page 53

**GLOSSARY.** Terminology for unusual flute sounds  
page 98

**APPENDIX.** Explanation of movement notation  
page 100

**TABLES.** Sets and scales employed  
page 104

(N.B. The approximate duration of the entire Three Mimes is 30 minutes)
2.1 ENTRY

FLUTIST WEARS FORMAL EVENING CLOTHES AND A MARCHING BAND SHAKO

MOVEMENT (See Appendix) offstage LEFT

\[ J = 144 \]

MUSIC (See Glossary)

\[ \text{stomp stomp stomp stomp stomp stomp stomp} \]

MUSIC

\[ \text{sempre ff} \]

\[ \text{stomp stomp} \]
*Correction: Turn to right, not left.
** Tap either toe, but only when marked T **
Scottish style marching

\[ d = 80 \]

- Extend left ft.; extend arms fwd.
- Extend right ft.; extend arms fwd.
- As though klaxon.

\[ \text{flute vertical} \]
\[ \text{flute horizontal} \]
\[ \text{flute vertical} \]

\[ \text{flute horizontal} \]
\[ \text{flute vertical} \]
\[ \text{as though clarinet} \]
flute vertical slowly raise flute...

...to protrude from right ear

slowly lower flute to playing position
2.6 BALLAD

MOVIE

\[ \text{\textit{Normal}} \]

\[ \text{\textit{poco f}} \]

\[ \text{\textit{rit. \ \ \ \ \ p\text{\textit{ tempo}}}} \]

\[ \text{\textit{poco f}} \]

\[ \text{\textit{rit. poco a poco}} \]

\[ \text{\textit{at} \ d = 56} \]
MIME 3. EVERY GOOD BOY DOES FINE

Duo mime for singer and flutist
in six stanzas

I practiced my cornet in a cold garage
Where I could blast it till the oil in drums
Boomed back; tossed free-throws till I couldn't move my thumbs;
Sprinted through tires, tackling a headless dummy.

In my first contest, playing a wobbly solo,
I blew up in the coda, alone on stage,
And twisting like my hand-tied necktie, saw the judge
Letting my silence dwindle down his scale.

At my first basketball game, gangling away from home
A hundred miles by bus to a dressing room,
Under the showering voice of the coach, I stood in a towel,
Having forgotten shoes, socks, uniform.

In my first football game, the first play under the lights
I intercepted a pass. For seventy yards I ran
Through music and squeals, surging, lifting my cleats,
Only to be brought down by the safety man.

I took my second chances with less care, but in dreams
I saw the bald judge slumped in the front row,
The coach and team at the doorway, the safety man
Galloping loud at my heels. They watch me now.

You who have always horne your way through passages,
Sat safe on the bench while some came naked to court,
Slipped out of arms to win in the long run,
Consider this poem a failure, sprawling flat on a page.

---David Wagoner

(text used by kind permission of author)
MIME 3. EVERY GOOD BOY DOES FINE

Both performers in full evening dress, singer with a sports fan's hat and flutist with a marching band shako.

MOUSICAL NOTATION (see appendix)

FLUTIST

SINGER

Music (see notation glossary)

Shout

ff

Presto ritmico

Shout sprint black took coach

Start at audience

Start at flutist

Look, look, look
in a cold garage where dead beats sit till dawn.
Basket ball toss
Snap Clap Stamp

PP tossed free throws

Basket ball toss
Snap Clap
Snap Clap
Snap Clap

Till I couldn't move my them - m - m - m - m - m - m -
gradually change POP to NORMAL

FL

MOV

b. ball toss;
bob head; simile

MUS

SR

MOV

one direction
direction

acc. 3

MUS

MOV

NR

Tempo
ad lib

ad d.t.

only
d.t.

Stamp

Tempo I
cover

MOV

FL

MUS

cresc

MOV

FL

MUS

MOV

Head,

hands
trembling

... etc... ...

SR

Head,

hands
trembling

... etc... ...

etc...
Clap Taps Clap Taps Clap Taps Clap

Sprinted through tires through tires

sprinted
tires sprinted through times
sprinted through tires, tackling a tackling a tackling a ling a

tack ling tackling tackling tackling a ling a
MOV

FL

SWIPE

MUS:

MOV (with both hands, as though drawing down shades over flutist's eyes)

SR

WHISPER

MUS:

VERSE II:

FL

MOV

Place left hand on top of flutist's head, swivel his head downstage; lower hand

MUS:

R

Place right hand on top of flutist's head, swivel his head downstage; lower hand

MUS:

Shout: ff

swivel upper torso rt ft. swivel downstage downstage downstage

Presto

stare at audience ritmico

swivel upper torso lt ft. swivel downstage downstage downstage

Shout: ff

swivel

dunmmy
dunmmy

dunmmy

dunmmy
In my first contest,

playing
MOV

\[ \text{AR} \quad \text{flitter} \quad \text{NR} \quad \text{AR} \]

\[ \text{Out} \quad \text{Tog} \quad \text{Up} \quad \text{Out} \quad \text{Tog} \quad \text{Up} \quad \text{Out} \]

\[ \text{Cl} \quad \text{Sn} \quad \text{Sn} \quad \text{St} \quad \text{Cl} \quad \text{Sn} \quad \text{St} \]

\[ \text{wo} \quad \text{bitty solo} \quad \text{bitty solo} \quad \text{bitty solo} \]

FL

\[ \text{AR} \quad \text{flitter} \quad \text{NR} \quad \text{AR} \]

\[ \text{Tog} \quad \text{Up} \quad \text{Out} \quad \text{Tog} \quad \text{Up} \quad \text{Out} \quad \text{Tog} \quad \text{Up} \quad \text{Out} \]

\[ \text{Cl} \quad \text{Sn} \quad \text{St} \quad \text{Cl} \quad \text{Sn} \quad \text{St} \quad \text{Cl} \quad \text{Sn} \quad \text{St} \]

\[ \text{blow up} \quad \text{blow up} \quad \text{gliss} \quad \text{gliss} \]
In the coda, a-

Gua passa
ad lib.

Loco

Drop hands

Love on stage, and twisting like my
hand-tied necktie, watched the judge letting my

silence dwindle
MOV

1. behind knees
straighten bend straighten
POP NR BZ NR
ff

SR

Low Cluck Whistle Slap

ff

* Trumpet against hard palate; Donald Duck sound

MOV

Alle marcia 15 va
120 (ossa) 15 va
AR BZ 15 va
ff

SR

Roar as a crowd
Clap
At my first basketball game,

...
FL

MOV

smear

FL

g'va... smear

AR

BZ

HT

MOV

throw

SR

bus

to a dressing
MOV

HR

MUS.M

b. b. b. b.

Hum  gliss.

MOV

simile... bend

room, Under the

MOV

straighten

stomp  clap throw

showering voice of the coach,
bend knees
stood in a towel, having forgotten

clasp hands in silent prayer
throw palms outward in despair
bow, hands still outward

shoes, socks,
VERSE IV:

Presto ritmico

mf coach!

Bend knees straighten

LV

Whisper

Lunga HT

Lunga

Right

Bend knees straighten

LV

Whisper

Lunga PT

Lunga

Right

LV

Whistle

Slap Side

Low Chuck

Pphh

Tongue against hard palate, a la Donald Duck
Alla marcia

Stomp

In my first football game, the

Mark Time

Hum 15th lower...

First play under the lights
Mark Time

Hum 15th lower

Intercepted a pass. For seventy yards.

Mark Time
Mark Time

(Hum 15th lower...)

through music and squeals,

(simile...)

(FLUTTER...)

(simile...)

(surging)
with less care, but in dreams I saw the bald judge

slumped in the front row, the coach the coach
tutto voce

the each and team

the each and team at the doorwa—

sempre pp
FL

SR

MOV

FL

SR

transform
POP poco a poco to
accel poco a poco al
simile
simile
simile
accel. motions poco a poco al
tempo ad lib

... etc.

The safety

safety, the safety man galloping, safety man loud
loping galloping loud at my heels.

WHISPER CADETTA
based on "They watch me now"

ad lib movements, tempos, whispered phonemes, bodily sounds, nuances

STEREOPHONIC GLISSANDO over entire stage

Sample possibilities: 

the the the the the the the the the the
accel. & rit., cresc. & dim.
VERSE VI:

Absolutely motionless to end

ff They watch me now

SING

ff They watch me now.

ff You watch me

always

Normal your way through passages
slept on the bench while some came naked to court,

slipped out of arms to turn in the
long run,
poem a failure,
FL

BZ

AR b

HT

Pop BZ

failure sprouting

FL

BZ

AR

flur

flur

flur

flur

flur

flur

flur

on a page
GLOSSARY (Terminology for unusual flute sounds)

AIR RUSH (A.R.) Production of tone by blowing through the tube without allowing any air to escape outside the embouchure hole (as in warming up the instrument before beginning to play). Pitch is controlled by varying the wind pressure and/or the fingering. The notation shows a regular notehead for the actual pitch and a small notehead for the note which corresponds to normal fingering, e.g.:

\[ \text{pitch} \]
\[ \text{fingering} \]

BEND In. Usual jazz meaning: start on pitch, go flat, return to pitch. Notation symbol: \( \cup \). May be done with lips or fingers.

HI-TONE (E-t) Production of two pitches simultaneously, using special embouchure and/or special fingerings. The notation is as above (regular notehead for pitch and small notehead for fingering), e.g.:

\[ \text{vent} \]
\[ \text{fingering} \]

SPLIT

BUZZ (Bz) Production of tone in the manner of a brass instrument, i.e., by vibrating the lips together directly into the embouchure hole. The notation sometimes uses the alto or bass clefs, e.g.:

\[ \text{pitch} \]
\[ \text{fingering} \]
These three different pitches, all produced with the same fingering, illustrate the fact that when the flute tube is buzzed, it overblows in the manner of a closed tube, producing not every overtone but every other one (e.g., if the fundamental is d-flat, the next higher pitch which can be produced by overblowing is not the d-flat one octave higher but rather the a-flat which is a twelfth higher.)

A similar acoustical phenomenon is characteristic of HT and stopped POP pitches, complicated by vented ("forked") fingerings whose explanation here would require an undue amount of space.

When all the keys of the flute are closed and that fundamental pitch is buzzed (which is d-flat on the third line of the bass clef for a flute with a c-footjoint or c on the second space of the bass clef for a flute with a b-footjoint), that is the lowest buzz pitch for which specific fingerings are required. Below that, buzz pitches are controlled solely by lip tension, approximating the timbre of the contra-bassoon and also (astonishingly) its range. In this contra-bass register the flute tube is acting, not as a resonator (being too short), but as a megaphone. Consequently, the fingerings have no effect on pitch. The sonority of this megaphone is proportionate to its length, maximum sonority being obtained by closing all keys of the flute tube and keeping them closed, regardless of what pitch is being buzzed.
APPENDIX (Explanation of the movement notation)

BRIEF SUMMARY

The movement notation tells the performer four basic things:

A. LOCATION: stand where the circle designates
B. ORIENTATION: face the way the stem points
C. DIRECTION: move the way the arrow points
D. SYNCHRONIZATION: move when movement and musical symbols are aligned

Each of these things is explained in detail below.

FULL EXPLANATION

A. LOCATION

1. Conceive the performing floor as a grid 12 paces x 12 paces, with lines 6 and 7 omitted:

   (the performer may choose his own pace-length.)

2. A small circle shows the performer's location (with lines 6 and 7 marked in as "ledger lines" when needed):
The above diagram, for example, shows the performer located at the sixth pace from stage right and at the sixth pace from downstage. Note the four abbreviations used:

L = Stage left  
R = Stage right  
DN = Downstage  
UP = Upstage

B. ORIENTATION

1. A stem on the circle shows the direction in which the performer faces. For example, the symbol \( \theta \) means: face oblique, left and upstage.

2. If the stem is on the left side of the circle (the performer's left), place the left foot at the location shown. For example, the symbol \( \theta \) means: face upstage, the left foot located at the place designated by the circle. Similarly with the right foot.

3. Two stems show both feet side by side at a given location. For example, the symbol \( \bigcirc \) means: face downstage, feet together at the location designated by the circle.

C. DIRECTION

1. If the stem is plain, halt. For example, the symbol \( \bigcirc \) means: halt, facing stage right, right foot forward.

2. If the stem has a slash, lift the foot and replace in same location. For example, the symbols \( \bigcirc \) mean: mark time, facing stage right.

3. If the stem has an arrowhead, move in the direction it points. For example:

\( \rightarrow \) move forward (placing left foot forward and facing stage right)  
\( \leftarrow \) move backward (placing left foot backward and facing stage right)  
\( \rightarrow \) move sideward (placing left foot sideward in the direction of upstage, thus crossing it over the right foot, and facing stage right)  
\( \rightarrow \) move sideward (placing right foot sideward in an upstage direction and facing stage right)  
\( \rightarrow \) hop forward (with both feet at once and facing stage right)  
\( \bigcirc \) hop, feet apart (simultaneously, while facing stage right)
4. Dotted lines show future movement. For example, the symbol means: the performer, who is presently facing downstage with his left foot forward, will now begin to pivot to the right on his left foot. The point at which he will stop pivoting is not shown by this symbol but by the next following symbol. (Note: if he were presently facing stage right with his left foot forward and were to begin pivoting to his left, the symbol would be ; thus, the solid stem shows the present location, not the future destination.)

For another example, the symbol means: the performer, who is presently facing stage right with left foot forward, will now begin to move forward along an arc-shaped path curving in an upstage direction. His destination is not shown by this symbol but by the next following symbol.

D. Synchronization:

1. The grid can be easily superimposed upon musical staff lines, for example:

   one quarter of the grid
   
   one half of the grid
   
   the entire grid

2. When a symbol on the movement staff is aligned above a symbol on the musical staff by means of a vertical line, the movement should be executed so as to reach the location at the moment when the note (or rest) is performed. For example:
means: step forward, facing stage right; place left foot at the fourth pace from stage left and the third pace from downstage at the moment when the note $a^4$ is performed.

**NOTE:** The forward movement occurs before the note $a^4$ is performed. It is not the movement but the location which is synchronized with the musical moment.

3. In the absence of movement symbols, continue the last movement given. For example,

\[
\begin{array}{c}
\text{MOVIE} \\
\text{D N} \\
\text{L} \\
\end{array}
\]

means: halt where shown, while continuing to play.
### TABLE II. Timbre Scale of Words

#### a. Twelve Words from Poem Classified Phonetically

<table>
<thead>
<tr>
<th></th>
<th>FRONT</th>
<th>CENTRAL</th>
<th>BACK</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLOSE</td>
<td>team</td>
<td>sprint</td>
<td>surge</td>
</tr>
<tr>
<td>HALF CLOSE</td>
<td>fail</td>
<td>took</td>
<td>coach</td>
</tr>
<tr>
<td>HALF OPEN</td>
<td>bench</td>
<td>blast</td>
<td></td>
</tr>
<tr>
<td>OPEN</td>
<td>down</td>
<td>...</td>
<td>sprawl</td>
</tr>
</tbody>
</table>

#### b. Phonetic Order Arranged Cyclically To Form Timbre Scale

1. team
2. fail
3. bench
4. down
5. sprawl
6. 'dummy'
7. sprint
8. blast
9. coach
10. took
11. surge
12. boom
### TABLE I. Structure of Various Sets Employed

<table>
<thead>
<tr>
<th>Pitch Sets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Order of Pitches</td>
</tr>
<tr>
<td>1st, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 12th</td>
</tr>
<tr>
<td>Intervals between Pitches (no. steps traversed in chromatic scale)</td>
</tr>
<tr>
<td>5, 2, 5, 2, 5, 6, 5, 2, 5, 2, 5, 6</td>
</tr>
<tr>
<td>Direction, each Interval (up or down the scale)</td>
</tr>
<tr>
<td>Prime ➔ Retrograde</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Word Sets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Order of Words</td>
</tr>
<tr>
<td>1st, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 12th</td>
</tr>
<tr>
<td>Intervals between Words (no. steps traversed on vowel scale)</td>
</tr>
<tr>
<td>5, 2, 5, 2, 5, 6, 5, 2, 5, 2, 5, 6</td>
</tr>
<tr>
<td>Direction, each Interval (clockwise or counterclockwise on scale)</td>
</tr>
<tr>
<td>Prime ➔ Retrograde</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non-verbal Sets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Order of Sounds</td>
</tr>
<tr>
<td>1st, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 12th</td>
</tr>
<tr>
<td>Intervals between Sounds (no. steps traversed on timbre weight scale)</td>
</tr>
<tr>
<td>3, 2, 3, 4, 5, 4, 1, 3, 3, 4, 3, 1</td>
</tr>
<tr>
<td>Direction, each Interval (clockwise or counterclockwise on scale)</td>
</tr>
<tr>
<td>Prime ➔ Retrograde</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pace Sets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Order of locations</td>
</tr>
<tr>
<td>1st, 2nd, 3rd, 4th</td>
</tr>
<tr>
<td>Intervals between Locations (no. paces traversed on floor grid)</td>
</tr>
<tr>
<td>5, 2, 5</td>
</tr>
<tr>
<td>Direction, each interval (up, down, left, or right on floor grid)</td>
</tr>
<tr>
<td>any, any, any</td>
</tr>
</tbody>
</table>
TABLE IV. 48 Pitch Sets Generated from Basic Structure

TWELVE INVERSIONS

\[ \downarrow \downarrow \downarrow \downarrow \downarrow \downarrow \downarrow \downarrow \downarrow \downarrow \downarrow \]
I II III IV V VI VII VIII IX X XI XII

\[ \rightarrow \rightarrow \rightarrow \rightarrow \rightarrow \rightarrow \rightarrow \rightarrow \rightarrow \rightarrow \rightarrow \rightarrow \]

1. F Bb C G A D Ab Eb Db Gb Eb B 1
2. C F G D E A Eb Bb Ab Db B Bb 2
3. Eb Ab Bb F G C Gb Db B E D A 3
4. Db Gb Ab Eb F Bb E B A D C G 4
5. Ab Db Eb Bb C F B F# E A G D 5
6. D G A E F# B F G Bb Eb Db Ab 6
7. G C D A B E Bb F Eb Ab Gb Db 7
8. A D E B G# F# C G F Bb Ab Eb 8
9. E A B F# G# C# G D C F Eb Bb 9
10. B F C G# A# D# A E D G F G 10
11. B E F# C F D# G# D A G C Bb F 11
12. B E F# C F D# G# D A G C Bb F 12

12. RETROGRADE INVERSIONS

\[ \uparrow \uparrow \uparrow \uparrow \uparrow \uparrow \uparrow \uparrow \uparrow \uparrow \uparrow \uparrow \]
TABLE III. Timbre Scale of Non-verbal Sounds

a. Twelve non-verbal sounds classified by timbral weight

<table>
<thead>
<tr>
<th>Type of Sound</th>
<th>Timbral Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. hiss</td>
<td></td>
</tr>
<tr>
<td>2. whistle</td>
<td></td>
</tr>
<tr>
<td>3. sh</td>
<td></td>
</tr>
<tr>
<td>4. tst</td>
<td></td>
</tr>
<tr>
<td>5. kiss</td>
<td></td>
</tr>
<tr>
<td>6. pt lips</td>
<td></td>
</tr>
<tr>
<td>7. ghh (tongue against hard palate; Donald Duck sound)</td>
<td>LIGHT</td>
</tr>
<tr>
<td>8. buzz lips</td>
<td></td>
</tr>
<tr>
<td>9. cluck tongue</td>
<td>MEDIUM</td>
</tr>
<tr>
<td>10. cough</td>
<td></td>
</tr>
<tr>
<td>11. flutter tongue or uvula</td>
<td></td>
</tr>
<tr>
<td>12. grunt</td>
<td>HEAVY</td>
</tr>
</tbody>
</table>

b. Weight order arranged cyclically to form timbre scale

12. hiss

11. whistle

10. tst

9. pt

8. buzz

7. cough

6. flutter

5. cluck

4. ghh

3. kiss

2. sh

1. hi
TABLE VII. Sample Pace Sets Generated from Basic Structure

Pace Set (score pages 42-43)

Pace Set (score pages 8-9)