379
N81
NO.6928

NONET FOR PERCUSSION AND TAPE

THESIS

Presented to the Graduate Council of the
University of North Texas in Partial
Fulfillment of the Requirements

For the Degree of

MASTER OF MUSIC

By

Timothy R. Crowley, B.M.
Denton, Texas

August, 1993

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Crowley, Timothy R. Nonet for percussion and tape. Master of Music (Composition), August, 1993, 69 pp., 6 illustrations, bibliography, 5 titles.

Nonet for percussion and tape is a twenty-two minute through-composed work for eight percussionists and tape.

The instrumentation includes: marimba, xylophone, glass wind chimes, slit drum, woodblock, vibraphone, crotales, metal wind chimes, snare drum, bass drum, tom-toms, temple blocks, bass marimba, log drum, cowbells, medium suspended cymbal, gongs, timbales, bongos, tambourine, roto-toms, timpani, and pre-recorded computer-generated/computer-sampled sound.

The self-designed computer-generated sound segments were created on a *NeXTstation* computer using the sound-synthesis application *Csound* and recorded onto Digital Audio Stereo Tape (DAT) at 44.1 KHz with 16-bit resolution. Computer-sampled material was recorded with an *Ariel* analog to digital microphone and processed on a *NeXTstation* computer using the application *.rt* at 44.1 KHz with 16-bit resolution.

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CHAPTER 1

INTRODUCTION

DISCUSSION AND ANALYSIS

Nonet for percussion and tape, a single-movement work for eight percussionists and pre-recorded computer music, is approximately twenty-two minutes in duration. The composition is scored for marimba, xylophone, glass wind chimes, slit drum, woodblock, vibraphone, crotales, metal wind chimes, snare drum, bass drum, tom-toms, temple blocks, bass marimba, log drum, cowbells, medium suspended cymbal, gongs, timbales, bongos, tambourine, roto-toms, timpani, and pre-recorded computer music.

The pre-recorded computer music segments were realized with the *Csound* sound-synthesis application on a *NeXTstation* computer. All computer-generated material was then recorded directly to Digital Audio Stereo Tape (DAT) at 44.1 KHz with 16-bit resolution. Mixing of sampled segments was achieved using the *NeXT* mixing environment, *.rt*, written by Paul Lansky and Kent Dickey at Princeton University.

My primary macro-compositional goal for *Nonet for percussion and tape* was to compose a work that combined the

greatest strengths of computer-generated sound with the greatest strengths of acoustic instruments in live performance. Since percussion instruments can readily be modeled as computer-generated sounds, I chose a large array of pitched and non-pitched percussion instruments to unify my composition. My intention was to create a twenty-two minute sonic experience in which the listener perceives an invisible ninth percussionist performing an unfamiliar instrument with "super-human" intensity.

Overall, the characteristics of this work reflect an attempt at assimilating the compositional procedures of several influential contemporary composers. In some sections, the melodic goal of the work is a montage with free timing parameters modeled from Morton Feldman's *Last Pieces* (1959). In other sections, the repetitive, multi-layered melodic ideas of Steve Reich in *Electric Counterpoint* (1987), *Music for Mallet Instruments, Voices, and Organ* (1973), and *Piano Phase* (1967) influenced the structures I was designing. The rhythmic ideas of John Cage in his *Second Construction* (1940) also served as models for building my free counterpoint ideas. I also credit the *CDCM Computer Music Series* (*Consortium to Distribute Computer Music on Compact Disc*) for shaping my ideas about the possibilities for computer-generated sounds.

Several works served as indirect models in that they are seminal works for the percussion ensemble genre and

served as a starting point in the definition of my own personal medium. Among these models are Edgard Varese's *Ionisation* (1931), Karlheinz Stockhausen's *Zyklus* (1959) and *Kontakte* (1959-60), Luciano Berio's *Circles* (1960), Dary John Mizelle's *Soundscape* (1976), David Evan Jones's *Still Life in Wood and Metal* (1989), Larry Austin's *Maze* (1966), and Charles Ives'/Larry Austin's *Life Pulse Prelude* (1911-51/1974-84).

There are thirteen distinct sections that comprise *Nonet for percussion and tape,* each approximately two minutes in length. The formal scheme is based on a palindromic structure of six forward sections, a centerpiece, and then the six initial sections in reverse order. Formal unity is achieved through four factors: 1) the pitch class relationships of each section, 2) the stylistic character of the paired palindromic sections, 3) the four recurring "Interlude" sections, and 4) the corresponding instrumentation choices of the paired sections (Figure 1).

The palindromic structure of the work is highlighted by the relationships of the pitch classes for each section. The pitch classes form an increasing spiral beginning with "C", progressing to a centerpiece of "A", and then a decreasing spiral returning back to "C" (Figure 2). In general, the paired palindromic sections (e.g. sections one and thirteen, two and twelve,etc.) are stylistically similar

Sect.	Dur.	P.C.	Subtitle	Instrumentation
1	1:25	C	Mysterious, timeless	Mar.,Vib.,DAT, B.Mar., Glass Chimes,Susp.Cymb., Tam-Tam, Wood-Block
2	1:35	Db	As fast as possible	Wood Block, DAT, Tom-Toms, Log Drum, Roto-Toms, Xyl., Bongos
3	1:36	B	Interlude	Mar.,Vib.,B.D.,B.Mar.,Tamb., Timp.
4	2:16	D	Introspective	DAT
5	:47	Bb	Interlude	Mar.,Vib.,B.D.,B.Mar.,Timb., Timp.
6	1:25	Eb	Distant, gradual	Xyl.,Slit Drum,Crotales,S.D., Temple Blks.,Cowbells,Bongos, Roto-Toms
7	2:00	A	Centerpiece	DAT
8	2:00	Eb	Nebulous	Glass Chimes, S.D., Temple Blks.,Sus.Cymb.,Gongs,Tamb.
9	1:45	Bb	Interlude	Xyl.,Slit Drum,Vib.,B.D., B.Mar.,Timb.,Timp.
10	2:16	D	Energetic	DAT,Xyl.,Vib.,B.Mar., Roto-Toms
11	1:36	B	Interlude	Mar.,Vib.,B.D.,B.Mar.,Tamb., Timp.
12	1:35	Db	As fast as possible	Wood Block, DAT, Tom-Toms, Log Drum, Roto-Toms, Xyl., Bongos
13	1:25	C	Mysterious, timeless	Mar.,Vib.,DAT, B.Mar., Glass Chimes,Susp.Cymb., Tam-Tam, Wood-Block

(21:39)

Fig. 1. Formal Overview

in nature. Tempos, textures and compositional approach define the stylistic character of each section. A third unifying factor is the recurrence of the four "Interlude" sections. These sections are based on expanding and/or contracting odd-meter dance forms. These sections are purely acoustic in instrumentation and serve as "light-hearted" relief from the serious nature of the piece as a whole. The fourth unifying factor is the choice of instrumentation for each section. In general, paired sections use similar instrumentation and performance techniques.

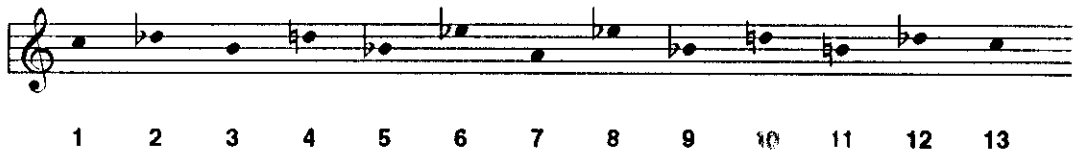


Fig. 2: Pitch Class Centers

Nonet for percussion and tape uses three methods for ensemble coordination: 1) video monitor displays for the performers to see the elapsed time in relation to the time lines on their parts, 2) visual cueing by the conductor during the non-metric sections of the piece, and 3) traditional conducting methods during the metric "Interlude"

segments. During the elapsed time sections, a video camera should be used to project the display window of the DAT playback device to the video monitors seen by the performers (see Figure 3) to coordinate their attacks and releases according to the time lines on their parts. In addition to the video displays, cues are to be given by a conductor during the non-metric sections by a "right-hand/left-hand finger" cue system. For example, the cue indication "1-1" in the score (see Figure 4) represents the index finger of the right hand and the index finger of the left hand. The performers have these indications in their parts and therefore accurate communication can occur during a live performance. Since there are only five fingers on each hand, a "modulus 5" system must be adhered to by the conductor and cues can only be cumulative within each section. During the four "Interlude" sections, the conductor is responsible for traditional time-keeping and cue duties.

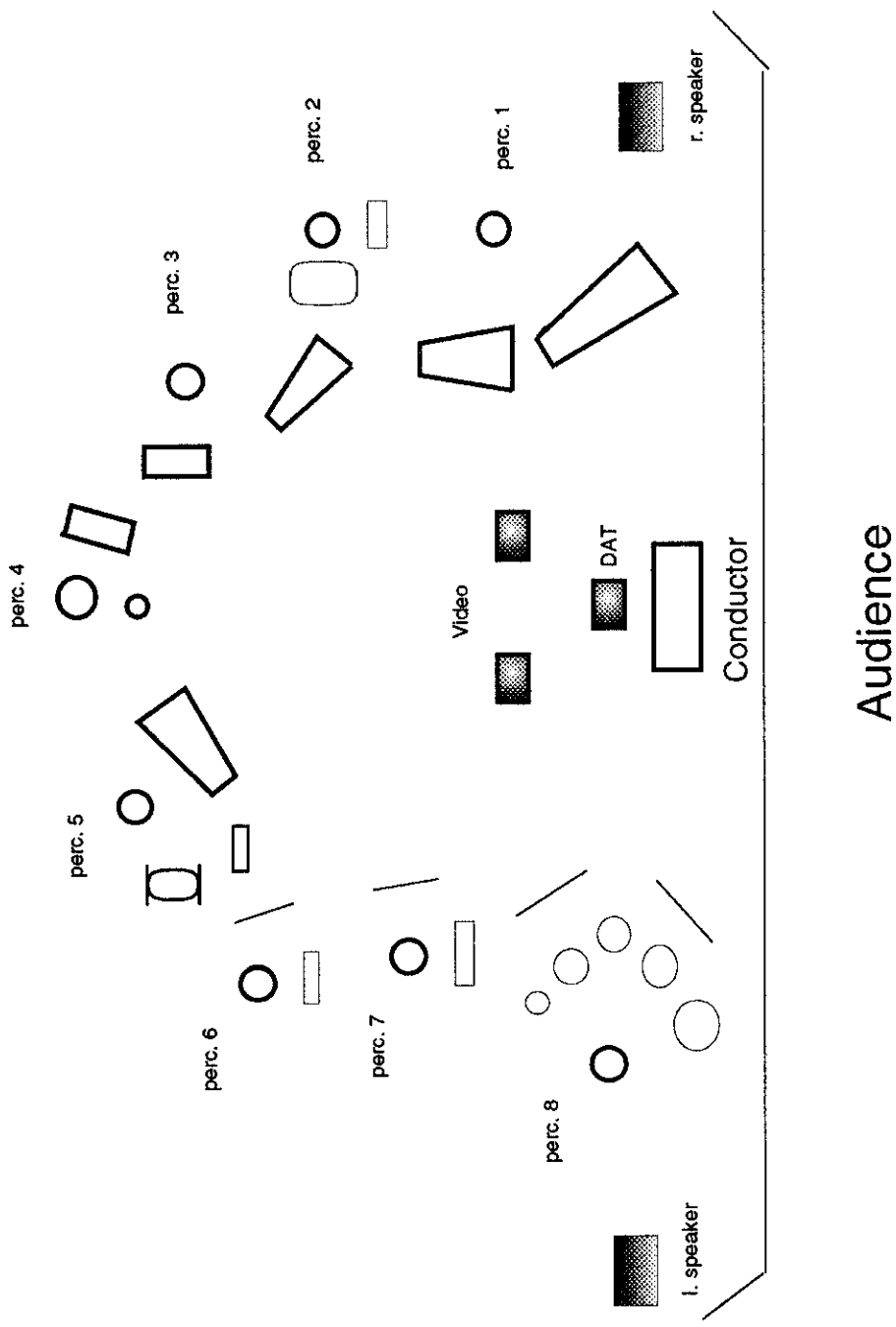


Fig. 3 The Ensemble Set-Up

CHAPTER 2

SECTION BY SECTION ANALYSIS

Section 1

Section one is a one minute and twenty-five second section in which the computer-generated material assumes a soloistic role over the accompanimental percussion figures. The section is subtitled "Mysterious, timeless", and the lack of rhythmic coordination between the accompanimental figures is meant to convey an improvisational introduction to the work. The percussion instrumentation calls for marimba, vibraphone, bass marimba, glass wind chimes, medium suspended cymbal, tam-tam, and wood-block. The computer-generated sounds were designed using "pluck" and comb-filtered "buzz" algorithms in the sound-synthesis application *Csound*. The comb-filtered sounds were also processed through a reverberation process (Figure 5). While the emphasis of this section is to create non-coordination between the percussion battery, the attacks on the tape are coordinated with portions of the percussion ensemble. This section is centered around the pitch class

"C" through frequent repetition, extended durations, and common-practice harmonic resolution and progression techniques. Pitches were chosen intuitively without any pre-conceived compositional process other than the goal to emphasize pitch class "C". The conductor should cue performers according to the right-hand/left-hand cue indication system described on the performance notes on the score.

Section 2

Section two is characterized by repetitive overlapping triplet motives on the tape and intense conflicting rhythms in the percussion battery. The computer-sampled sounds are taken directly from a marimba pre-set timbre on a *Yamaha DX-11* MIDI sequencer. The percussion instrumentation includes: wood block, tom-toms, log drum, roto-toms, xylophone, and bongos. The intent of this section is to create a barrage of frenetic activity for one minute and thirty-five seconds. The phasing that occurs on the tape is purposeful, and the tempo indication "As fast as possible" should be taken literally. This section is centered around the pitch class "Db" according to the processes described in section one.

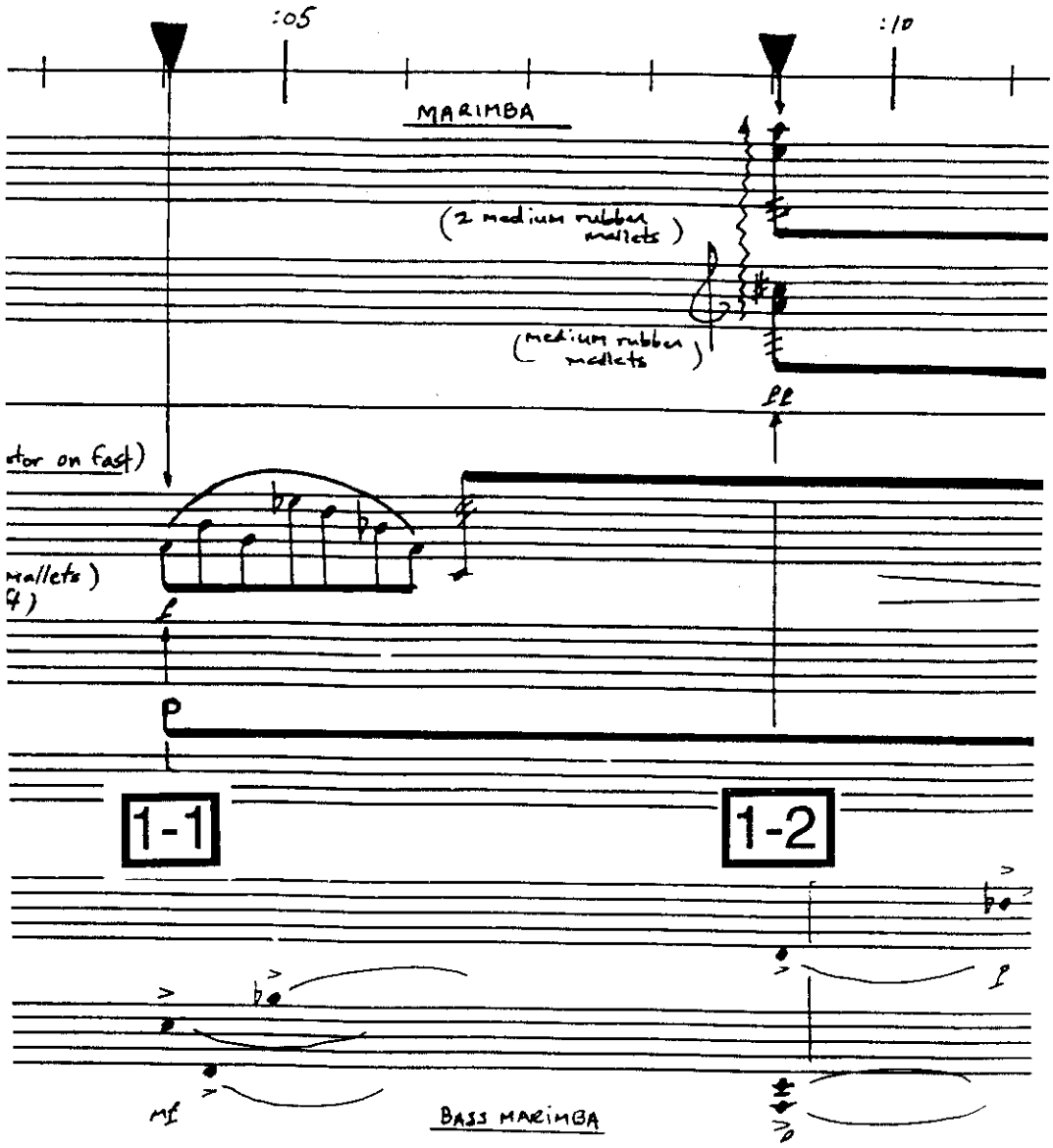


Fig. 4: "Right/Left Finger" Cue System

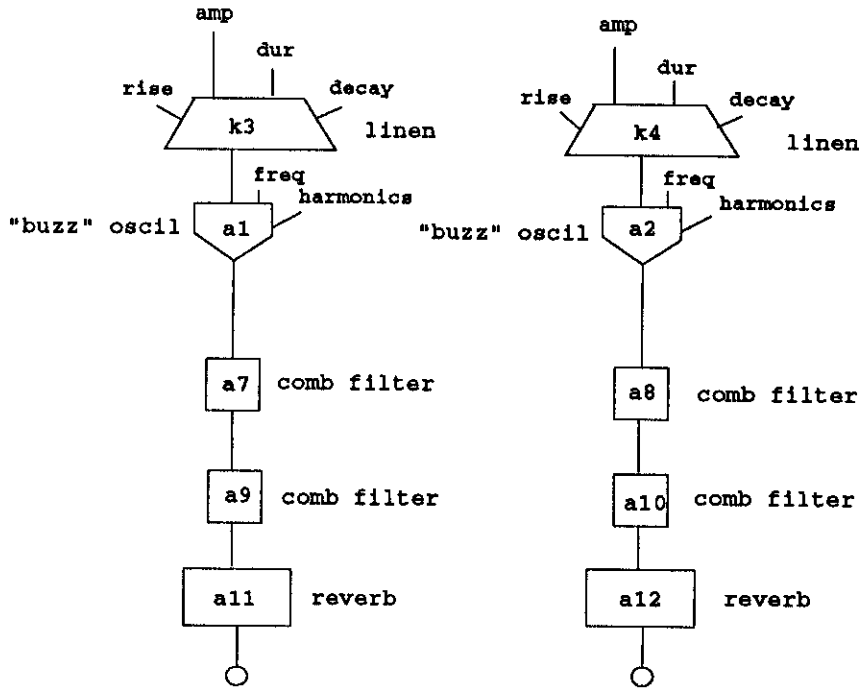


Fig. 5: A "Buzz" FM instrument

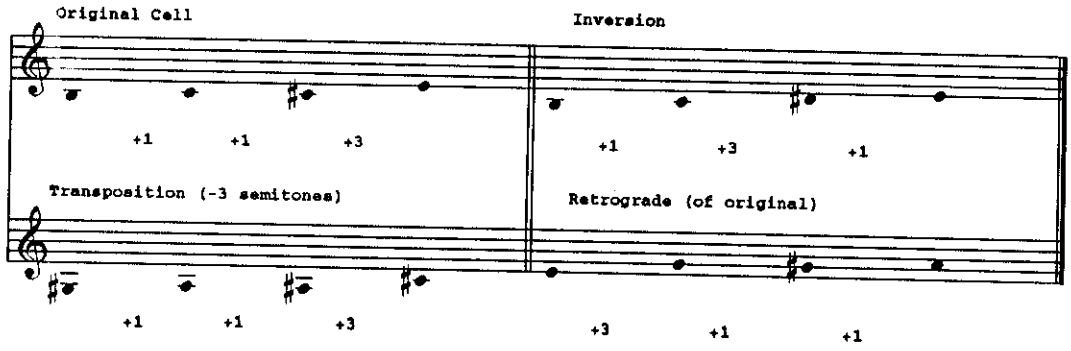


Fig. 6: "Interlude" Cellular Processes

Section 3

Section three, subtitled "Interlude", is meant as a relief section from the serious nature of section one and the intensity of section two. Section three is the first of four such segments. This section calls for acoustic percussion instruments alone. The instrumentation for section three includes: marimba, vibraphone, bass drum, bass marimba, tambourine, and timpani. The pitches in this section center around "B" and the pitch choices were derived from a "cellular" composition process. Harmony was derived from simple inversion, retrograde, and transposition of this original four-pitch "cell" (Figure 6).

Section 4

Section four, subtitled "Introspective", is a computer-generated tape solo passage without percussion instruments. This section is centered around the pitch class "D" and is approximately two minutes and fifteen seconds in duration. Computer-generated material for this section was composed using subtractive synthesis techniques mixed in *.rt* with soundfiles from section one. The resultant mix was transposed down ten semitones, and the

duration of the new soundfile was increased by a factor of one and six tenths.

Section 5

Section five is a return to the "Interlude" concept of section three. Only acoustic instruments are used, and the instrumentation is the same as section three. This "Interlude" is centered around the pitch class "Bb" and progresses as a diminishing form, in opposition to the scheme of section three. Therefore, this section is approximately fifty seconds in length as compared to the one minute and thirty-six second length of section three. Cellular pitch processes were utilized in this section as well as in section three (Figure 6).

Section 6

Section six, subtitled "Distant, gradual", involves the following instrumentation in a double quartet orchestration: xylophone, slit drum, crotales, snare drum, temple blocks, cowbells, bongos, and roto-toms. The compositional goal behind this section is a colorful dialogue between the two quartets where rhythm and timbre become preeminent over

pitch. Time for each section is intuitively determined by the conductor, although there are two instances of defined time in seconds on page twenty-nine. The conductor should let the rhythms and colors evolve over a greater amount of time than the spatial arrangment of the score would appear to indicate. Percussionist number three should use a cello or bass bow to perform the crotales part. The pitch class center for this section is "Eb".

Section 7

Section seven, subtitled "Centerpiece", involves only pre-recorded computer music. This section is centered around pitch class "A". Computer-generated material was created by transposing a mix of previous material from sections one, two, and four and altering amplitude curves, entrance timings, soundfile durations, and overall balance of this material.

I believe that one of the methods for creating coherence in this composition is achieved through the recurrence of previously-designed computer music elements, whether slightly altered (as in this section) or strictly repeated (as in sections three and eleven). *Nonet for percussion and tape* requires structure at this micro-compositional level to unify the composition as a whole.

Section 8

Section eight, subtitled "Nebulous", is scored for glass chimes, snare drum, temple blocks, suspended cymbal, gongs, and tambourine. This section is a duet between the snare drum and temple blocks with the other instruments serving an accompanimental role. As in section six, time is intuitively decided upon in performance by the conductor and the primary goal is to achieve musical coherence without the benefit of definite pitches.

Section 9

Section nine, subtitled "Interlude", is a slight alteration to the "Interlude" formal concept presented in sections three and five. While the instrumentation remains the same, the tempo has increased considerably and the form expands. This section centers on pitch class "Bb" and is approximately one minute and forty-five seconds in duration.

Section 10

Section ten, subtitled "Energetic", uses the same computer-generated material as section four. However, unlike section four, the following percussion instruments are employed in creating a vigorous accompanimental pattern with the tape: xylophone, vibraphone, bass marimba, and roto-toms. This section is centered around pitch class "D" and is two minutes and sixteen seconds in duration.

Section 11

Section eleven, subtitled "Interlude" is a strict repetition of the material in section three. This section centers on pitch class "B" and is approximately one minute and thirty-five seconds in duration.

Section 12

Section twelve, subtitled "As fast as possible", is a strict repetition of the material in section two. This section centers on pitch class "Db" and is one minute and thirty-five seconds in duration.

Section 13

Section thirteen, subtitled "Mysterious, timeless" is a strict repetition of the material in section one. This section centers on pitch class "C" and is one minute and twenty-five seconds in duration.

BIBLIOGRAPHY

Adler, Samuel. *The Study of Orchestration*, 2nd ed. New York: W.W. Norton, 1989.

Austin, Larry and Clark, Thomas. *Learning to Compose: Modes, Materials, and Models of Musical Invention*. Dubuque, Iowa: William C. Brown, 1989.

Dodge, Charles and Jerse, Thomas A. *Computer Music: Synthesis, Composition, and Performance*. New York: Schirmer Books, 1985.

Lansky, Paul and Dickey, Kent. *RT: realtime mixer*. Princeton, NJ: Princeton University, 1991.

Vercoe, Barry. *Csound: A Manual for the Audio Processing System and Supporting Programs with Tutorials*. Cambridge, Massachusetts: Massachusetts Institute of Technology, 1992.

Tim Crowley

NONET FOR PERCUSSION AND TAPE

eight percussionists and tape

Percussion 1: Marimba (4+1/3 octave), Xylophone (3+1/2 octave)

Percussion 2: Glass Wind Chimes, Slit Drum, Woodblock

Percussion 3: Vibraphone, Crotales (full 2 octave chromatic set), Metal Wind Chimes

Percussion 4: Snare Drum, Bass Drum, Tom-Toms (4)

Percussion 5: Bass Marimba, Temple Blocks (6), Log Drum (4 pitches)

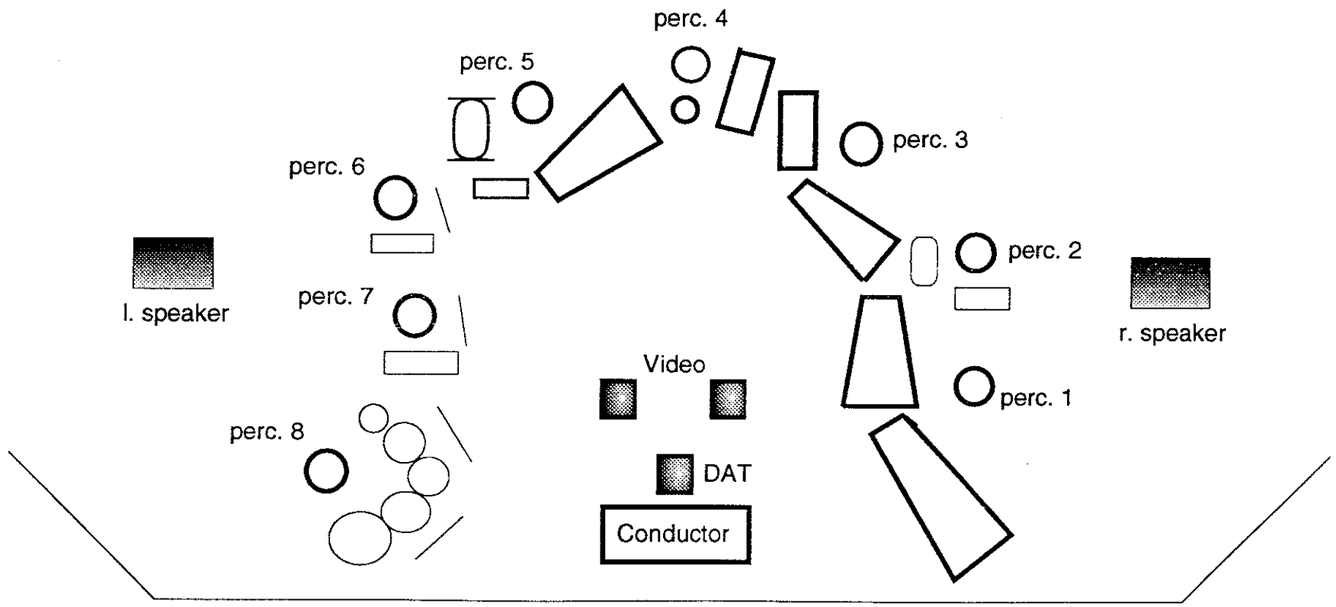
Percussion 6: Cowbells (3), Medium Suspended Cymbal, Gongs (3), Large Tam-Tam

Percussion 7: Timbales (2), Bongos, Tambourine

Percussion 8: Roto-Toms (4), Timpani (5)

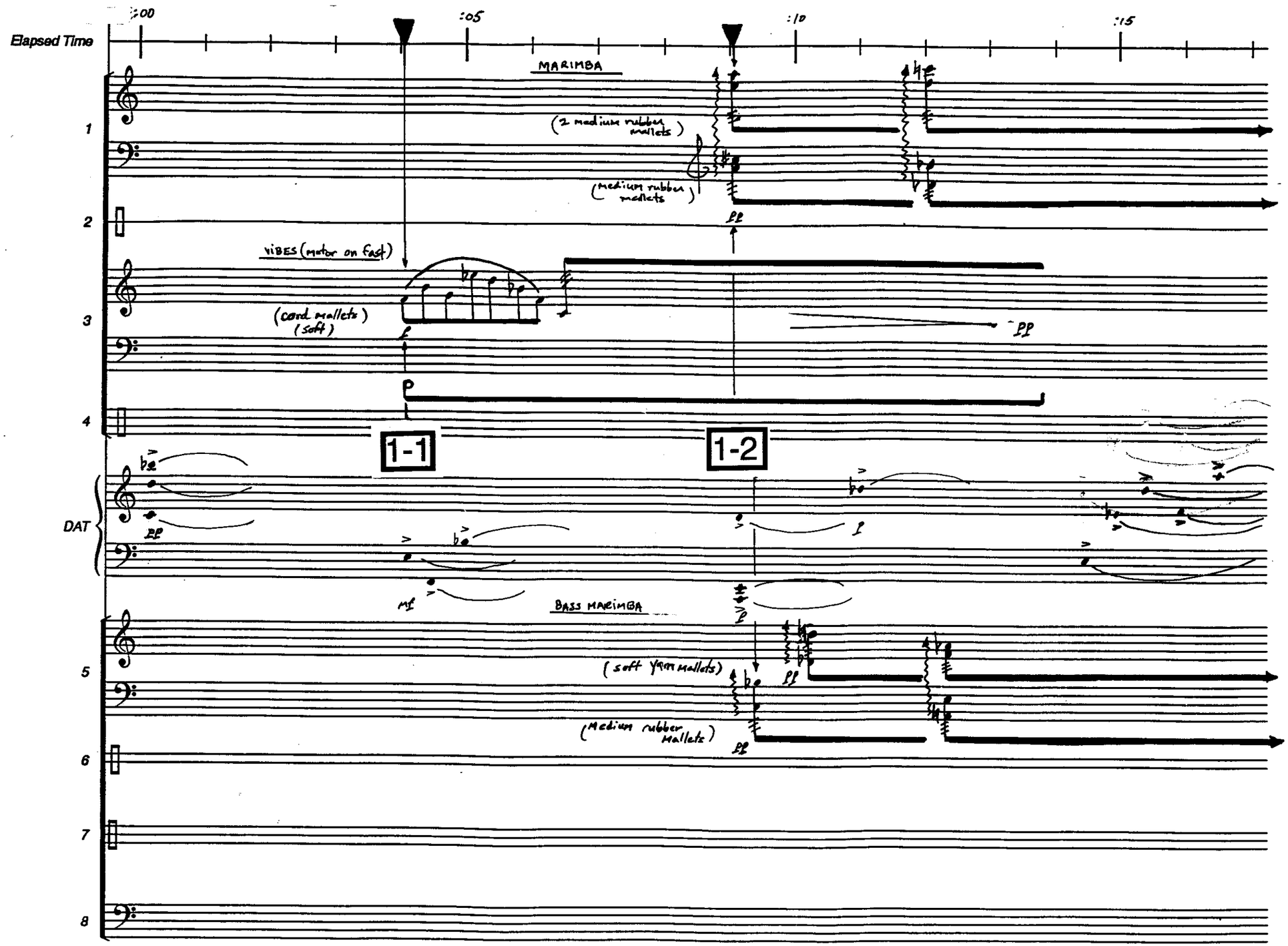
Performance Notes: The performers should be set up according to the diagram on the next page. Elapsed time sections should be presented to the performers using at least two (2) video displays of the DAT playback time display during the performance of the piece. Percussion 3 should have a contrabass or cello bow for section 6. Conductor cues are numbered by section according to a right hand-left hand indication system. For example, in section 6, cue "1-5", would be indicated by holding the first finger of the right hand and all five fingers of the left hand. Therefore, a "modulus 5" system must be adhered to for all cues. Cues are only cumulative within a section.

The taped segments were recorded onto a DAT tape at 44.1KHz sampling rate with 16-bit resolution. The playback device used should meet or exceed these technical specifications.


perc. 4
perc. 5
perc. 3
perc. 6
perc. 2
l. speaker
perc. 7
r. speaker
Video
perc. 1
perc. 8
DAT
Conductor

Audience

1



Elapsed Time
:00
:05
:10
:15
MARIMBA
(2 medium rubber mallets)
(medium rubber mallets)
VIBES (motor on fast)
(cord mallets)
(soft)
1-1
1-2
DAT
BASS MARIMBA
(soft yarn mallets)
(Medium rubber Mallets)
1
2
3
4
5
6
7
8

:17 :22 :27 :32

Elapsed Time

MARIMBA 1

2

glass chimes

VIBRAPHINE 3

1-4

1-5

4

1-3

DAT

BASS MARIMBA 5

6

med. susp. cymbal

(soft yarn mallets) p

7

8

:34 :39 :44 :49

Elapsed Time

MARIMBA 1

GLASS W. CHIMES 2

VIBRAPHONE 3

4

2-1

DAT

BASS MARIMBA 5

MED. SUSP. CYMB. 6

7

8

BASS MARIMBA

Susp. cymbal

Elapsed Time :51 :56 1:01 1:06

MARIMBA 1

GLASS W. CHIMES 2

VIBRAPHONE 3

4

DAT

BASS MARIMBA 5

SUSP. CYMBAL 6

7

8

2-2 2-3 2-4

Tam-Tam

Elapsed Time

1:08 1:13 1:18 1:23 1:25

MARIMBA 1

GLASS W. CHIMES 2

VIBRAPHONE 3

4

DAT

BASS MARIMBA 5

TAM-TAM 6

7

8

(stopped w/ left hand)

pp

WOOD BLOCK

pp

p

mf

pp

2-5

p

pp

(stopped w/ left hand)

pp

mf

pp

AS FAST AS POSSIBLE

2

Elapsed Time

1:34 1:39 1:44 1:49

1

2 WOOD BLOCK

mf

3

4

1-1

DAT

mf mp

p

5

6

7

8

Elapsed Time

1:56 2:01 2:06

1

WOODBLOCK 2 (WOOD BLOCK)

3

TOM-TOMS

4

1-2

mf f mf

DAT

mp

1-3

LOG DRUM (hard mallets)

5 mf 6 6

6

7

8

Elapsed Time

2:08 2:13 2:18 2:23

1

WOOD BLOCK 2 (WOOD BLOCK)

3

TOM-TOMS 4 (TOM-TOMS)

1-4 1-5

DAT mp mp

(LOG DRUM)

LOG DRUM 5

6

BONGOS 7 mf < f > mf < f > mf

ROTO-TOMS 5 5 f mf

8

Elapsed Time

2:30 2:35 2:40

XYLOPHONE

1

(WOOD BLOCK)

mf f ff f

WOOD BLOCK 2

3

(TOM-TOMS)

TOM-TOMS 4

2-1 2-2

DAT

mp mp

(LOG DRUM)

LOG DRUM 5

mf f mf f

6

(BONGOS)

BONGOS 7

(ROTO-TOMS)

ROTO-TOMS 8

Elapsed Time

2:47

2:52

2:57

XYLOPHONE 1

(WOOD BLOCK)

WOOD BLOCK 2

3

(TOM-TOMS)

TOM-TOMS 4

2-3

2-4

DAT

(LOG DRUM)

LOG DRUM 5

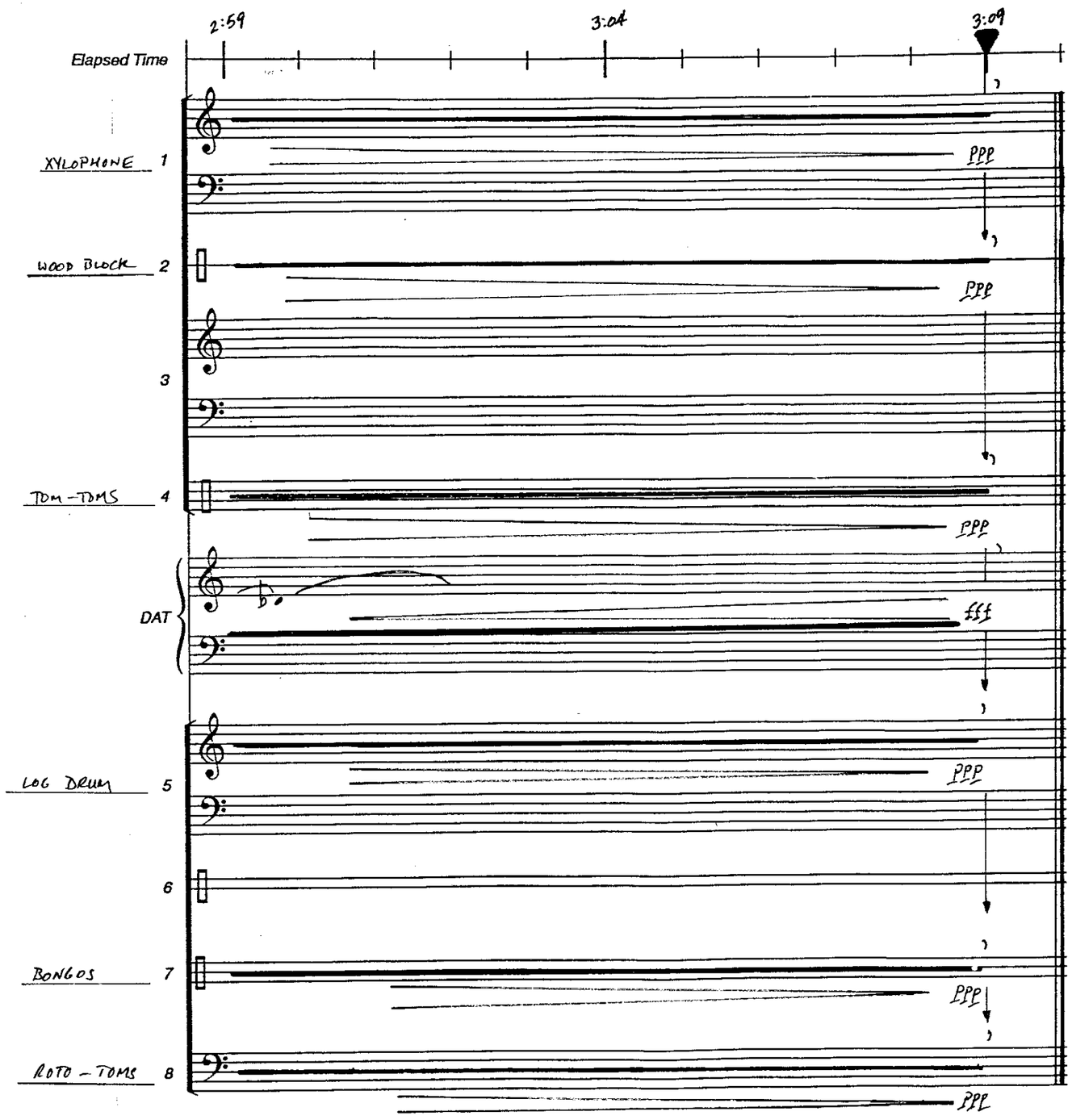
6

(BONGOS)

BONGOS 7

(ROTO-TOMS)

ROTO-TOMS 8


2:59
3:04
3:09
Elapsed Time
XYLOPHONE 1
WOOD BLOCK 2
3
TOM-TOMS 4
DAT
LOG DRUM 5
6
BONGOS 7
ROTO-TOMS 8
ppp
fff

3

MODERATE DANCE TEMPO ♩ = 76

MARIMBA 1

VIBES 3

BASS DRUM 4

DAT

BASS MARIMBA 5

TAMBOURINE 7

TIMPANI 8

3x 3x 3x

mp f

(motor on fast)

2x

3x

3x

MARIMBA 1

2

VIBRAPHONE 3

BASS DRUM 4

DAT

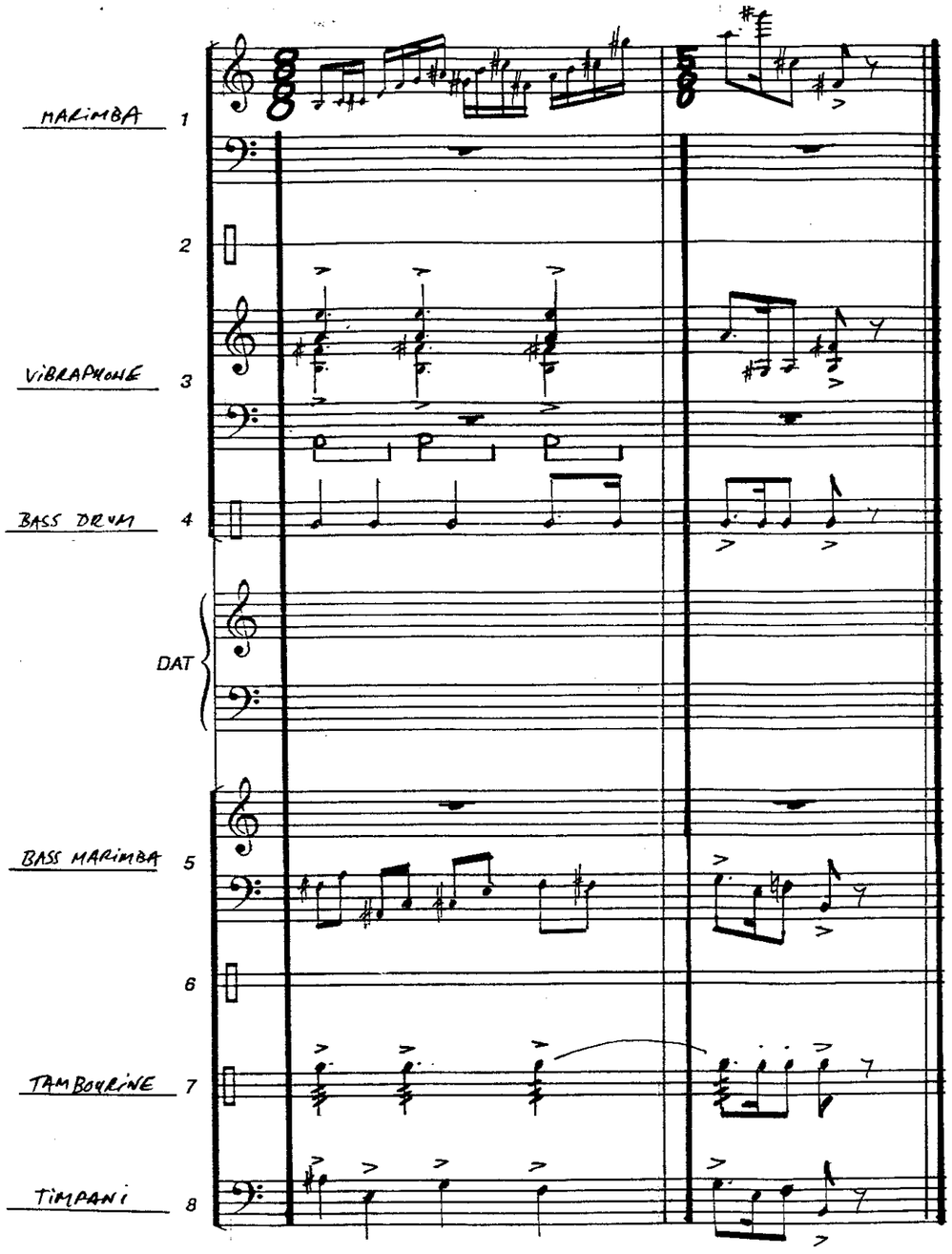
BASS MARIMBA 5

6

TAMBOURINE 7

TIMPANI 8

l.v.


MARIMBA 1
2
VIBRAPHONE 3
BASS DRUM 4
DAT
BASS MARIMBA 5
6
TAMBOURINE 7
TIMPANI 8

4

Elapsed Time 3:17 3:22 3:27 3:32

1

2

3

4

DAT

5

6

7

8

Elapsed Time 3:34 3:39 3:44 3:49

1

2

3

4

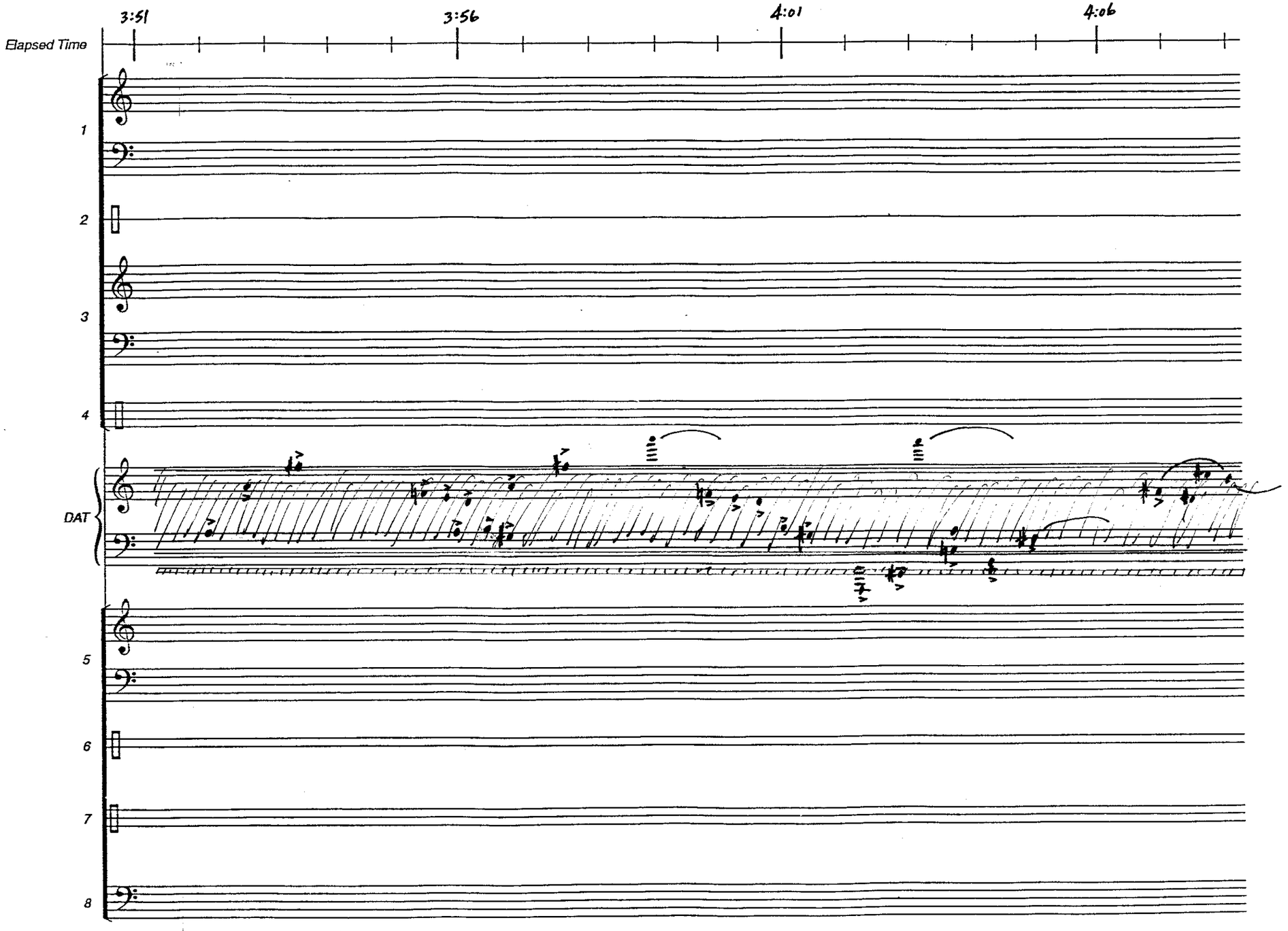
DAT

5

6

7

8


3:51
3:56
4:01
4:06
Elapsed Time
1
2
3
4
DAT
5
6
7
8

4:08 4:13 4:18 4:23

Elapsed Time

1

2

3

4

DAT

5

6

7

8

Elapsed Time

4:25 4:30 4:35 4:40

1

2

3

4

DAT

5

6

7

8

4:42 4:47 4:52 4:57

Elapsed Time

1

2

3

4

DAT

5

6

7

8

4:59 5:04 5:09 5:14

Elapsed Time

1

2

3

4

DAT

5

6

7

8

5:16 5:21 5:26 5:31

Elapsed Time

1

2

3

4

DAT

(B)

5

6

7

8

Elapsed Time 5:33 5:38 5:43 5:46

1

2

3

4

DAT

5

6

7

8

5

INTERLUDE ♩ = 88

MARIMBA 1

2

VIBRAPHONE (motor on slow) 3

BASS DRUM 4

DAT

BASS MARIMBA 5

6

TIMBALES (w/ hands) 7

TIMPANI 8

MARIMBA 1

2

VIBRAPHONE 3

BASS DRUM 4

DAT

BASS MARIMBA 5

6

TIMBALES (u/hands) 7

TIMPANI 8

6

DISTANT, GRADUAL

XYLOPHONE 1

pp

SLIT DRUM 2

pp

CROTALES 3
(w/bass bow)

l.v. l.v. l.v. l.v. simile

p

TOM-TOMS 4

pp

DAT

1-1

TEMPLE BLOCKS 5

COWBELLS 6

BONGOS 7

ROTO-TOMS 8

XYLOPHONE 1

SLIT DRUM 2

CROTALES 3

TOM-TOMS 4

1-2

1-3

1-4

2x

DAT

(soft mallets)

TEMPLE BLOCKS 5

COWBELLS 6

BONGOS 7

ROTO-TOMS 8

XYLOPHONE 1

SLIT DRUM 2

CROTALES 3

TOM-TOMS 4

DAT

TEMPLE BLOCKS 5

COWBELLS 6

BONGOS 7

ROTO-TOMS 8

2x

15"

20"

1-5

2-1

2-2

2-3

2-4

-30-

CENTERPIECE

7

Elapsed Time 5:58 6:03 6:08 6:13

1

2

3

4

DAT

5

6

7

8

Elapsed Time

6:15 6:20 6:25 6:30

1

2

3

4

DAT

etc.

5

6

7

8

Elapsed Time 6:32 6:37 6:42 6:47

1

2

3

4

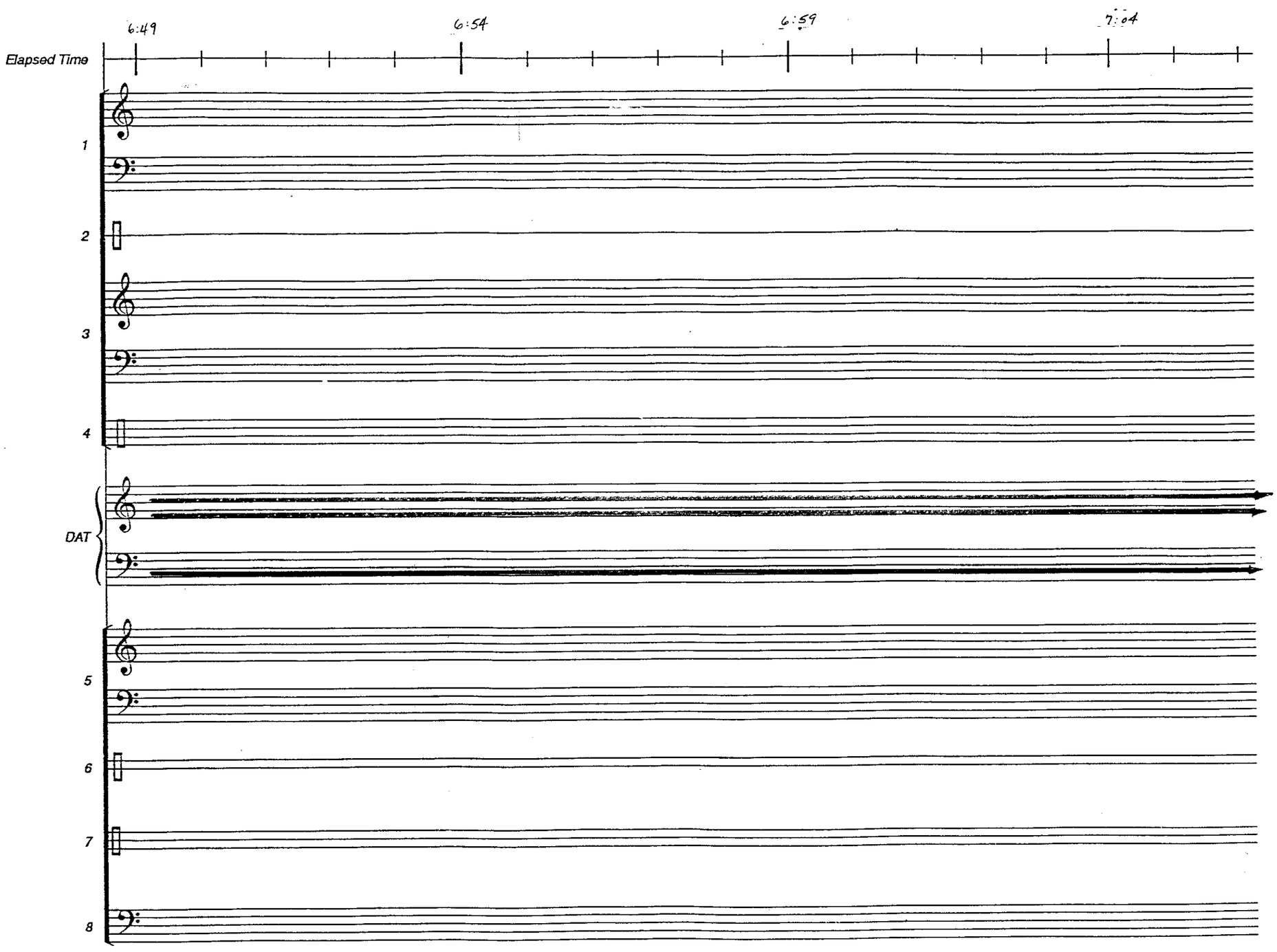
DAT

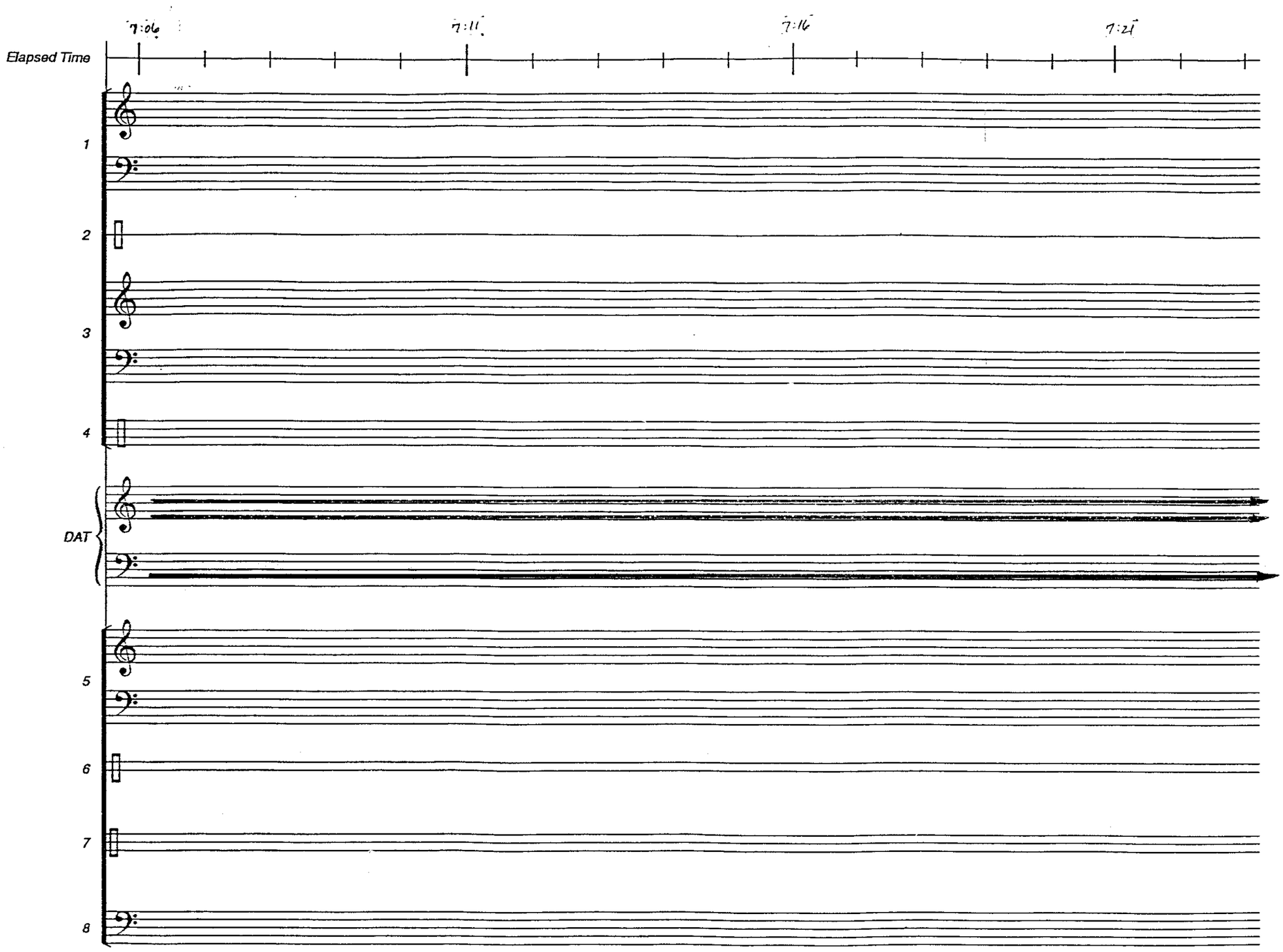
5

6

7

8


6:49
6:54
6:59
7:04
Elapsed Time
1
2
3
4
DAT
5
6
7
8


7:06
7:11
7:16
7:21
Elapsed Time
1
2
3
4
DAT
5
6
7
8

Elapsed Time 7:23 7:28 7:33 7:38

1

2

3

4

DAT

5

6

7

8

Elapsed Time 7:40 7:45 7:50 7:55

1

2

3

4

DAT

5

6

7

8

Elapsed Time 7:57 8:02 8:07 8:11

1

2

3

4

DAT

decres.

decres.

5

6

7

8

8

NEBULOUS

GLASS CHIMES

SNARE DRUM
(cloth over head)

DAT

TEMPLE BLOCKS

SUSP. CYMBAL
GONGS

TAMBOURINE

1 2 3 4 5 6 7 8

pp l.v.

1-1 1-2 1-3 1-4

mp fp mf

GLASS CHIMES 2

SNARE DRUM 4

DAT

TEMPLE BLOCKS 5

SUSP. CYMBAL / GONGS 6

TAMBOURINE 7

1

3

8

mfp

pp

mp

l.v.

(take cloth off)

1-5

2-1

2-2

2-3

2-4

2-5

(susp. cymb.)

mf

niente

GLASS CHIMES 2

SNARE DRUM 4

3-1 3-2 3-3 3-4 3-5

DAT

TEMPLE BLOCKS 5

SUSP. CYMB. - GONGS 6

TAMBOURINE 7

susp. cymb. (on cup w/drum stick)

cresc. poco a poco

(rim) (cup) (rim)

cresc.

cresc.

1

GLASS CHIMES 2

3

SNARE DRUM 4

DAT

TEMPLE BLOCKS 5

SUSP. CYMB. 6
GONGS

TAMBOURINE 7

8

4-1 4-2 4-3 4-4 4-5

ff pp p

Susp. cymb.
(soft mallet)

mp pp

GLASS CHIMES 2

SNARE DRUM 4

DAT

5-1

5-2

5-3

TEMPLE BLOCKS 5

SUSP. CYMBAL / GONGS 6

susp. cymb.

TAMBOURINE 7

9

INTERLUDE ♩ = 108

XYLOPHONE 1

SLIT DRUM 2

VIBRAPHONE (motor on medium) 3

BASS DRUM 4

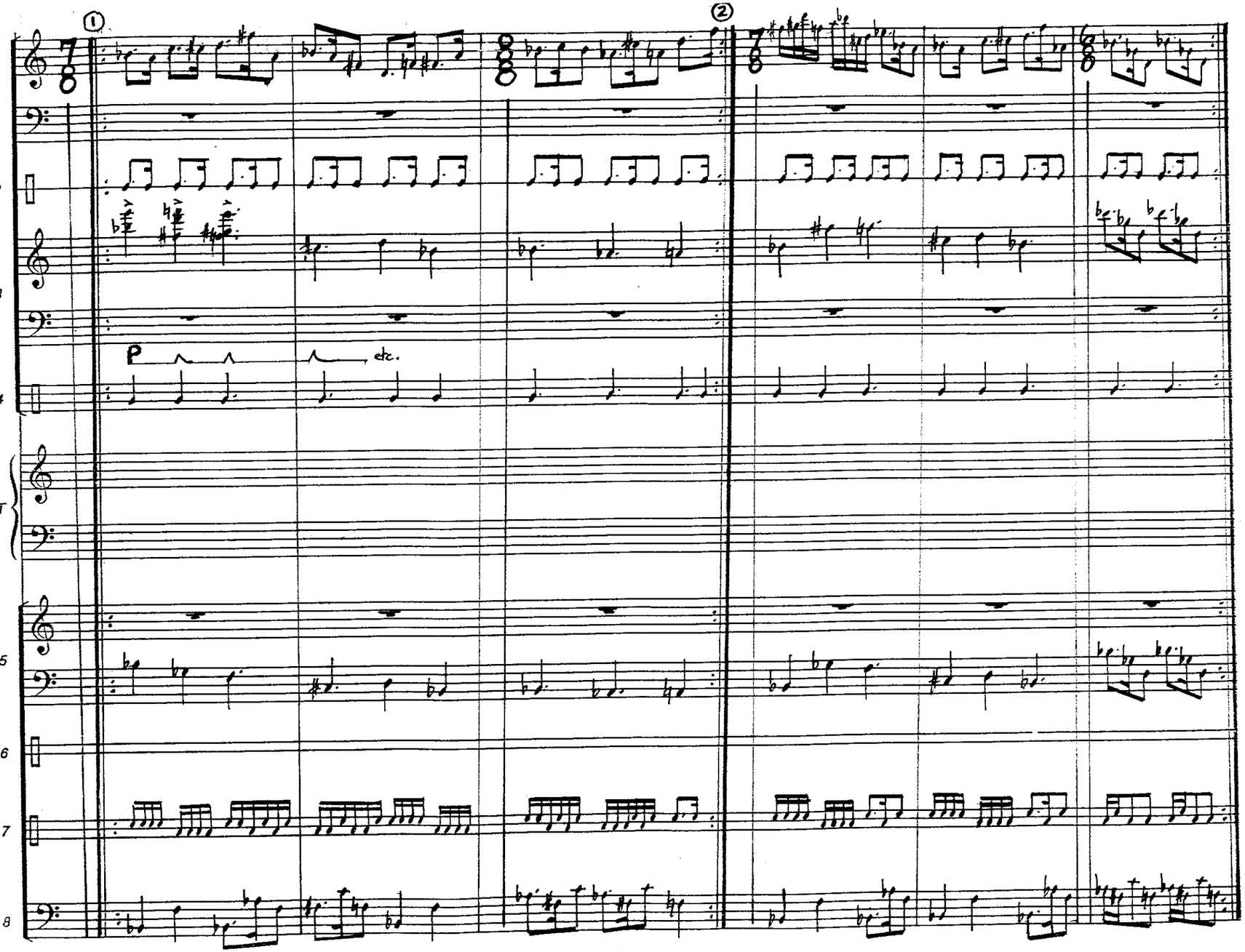
DAT

BASS MARIMBA 5

6

TIMBALES 7

TIMPANI 8



3x

XYLOPHONE 1

SLIT DRUM 2

VIBRAPHONE 3

BASS DRUM 4

DAT

BASS MARIMBA 5

6

TIMBALES 7

TIMPANI 8

10

ENERGETIC

Elapsed Time

8:21 8:26 8:31 8:35

XYLOPHONE
(medium mallets)

1

2

VIBRAPHONE
(soft mallets - Motor on Medium)

3

p

(no pedal)

4

1-1

1-2

DAT

mf

BASS MARIMBA

5

6

7

ROTO-TOMS

8

8:37 8:42 8:47 8:52

Elapsed Time

XYLOPHONE 1

2

VIBRAPHONE 3

4

15ma

DAT

BASS MARIMBA 5

6

7

ROTO-TOMS 8

8:54 8:59 9:04 9:09

Elapsed Time

XYLOPHONE 1

2

VIBRAPHONE 3

4

DAT

BASS MARIMBA 5

6

7

TOMS 8

9:11 9:16 9:21 9:26

Elapsed Time

XYLOPHONE 1

2

VIBRAPHONE 3

4

DAT

BASS MARIMBA 5

6

7

ROTO-TOMS 8

9:28 9:33 9:38 9:43

Elapsed Time

XYLOPHONE 1

2

VIBRAPHONE 3

4

1-3 1-4

DAT

BASS MARIMBA 5

PP

6

7

ROTO-TOMS 8

PP

9:45 9:50 9:55 10:00

Elapsed Time

XYLOPHONE 1

2

VIBRAPHONE 3

4

DAT

BASS MARIMBA 5

6

7

ROTO-TOMS 8

Elapsed Time

10:02 10:07 10:12 10:17

XYLOPHONE 1

2

VIBRAPHONE 3

4

1-5

DAT

BASS MARIMBA 5

6

7

ROTO - TOMS 8

10:19 10:24 10:29 10:34

Elapsed Time

XYLOPHONE 1

2

VIBRAPHONE 3

4

DAT

BASS MARIMBA 5

6

7

ROTO-TOMS 8

10:36 10:41 10:46 10:51

Elapsed Time

XYLOPHONE 1

2

VIBRAPHONE 3

4

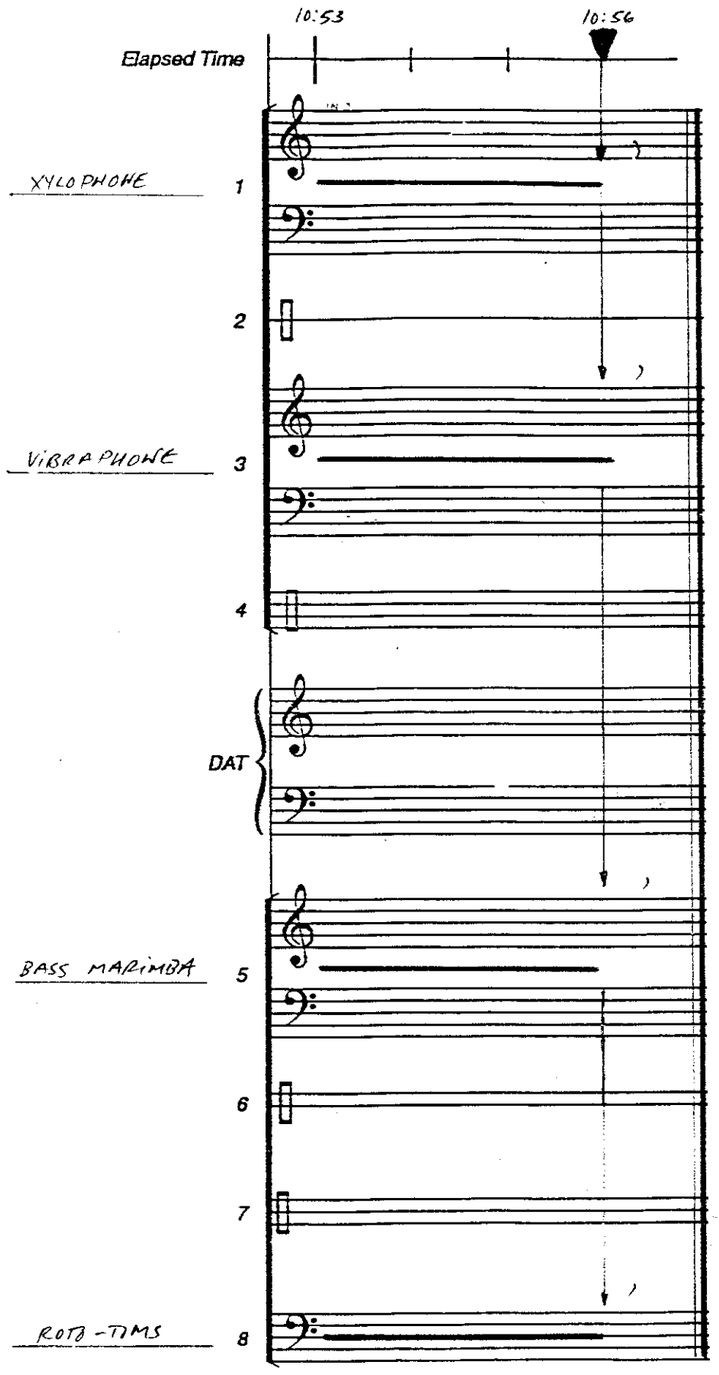
DAT

BASS MARIMBA 5

6

7

ROTO-TOMS 8


10:53
10:56
Elapsed Time
XYLOPHONE
1
2
VIBRAPHONE
3
4
DAT
BASS MARIMBA
5
6
7
ROTO-TOMS
8

11

INTERLUDE ♪=76

MARIMBA 1

2

VIBRAPHONE 3

BASS DRUM 4

DAT

BASS MARIMBA 5

6

TAMBOURINE 7

TIMPANI 8

MARIMBA 1

2

VIBRAPHONE 3

BASS DRUM 4

DAT

BASS MARIMBA 5

6

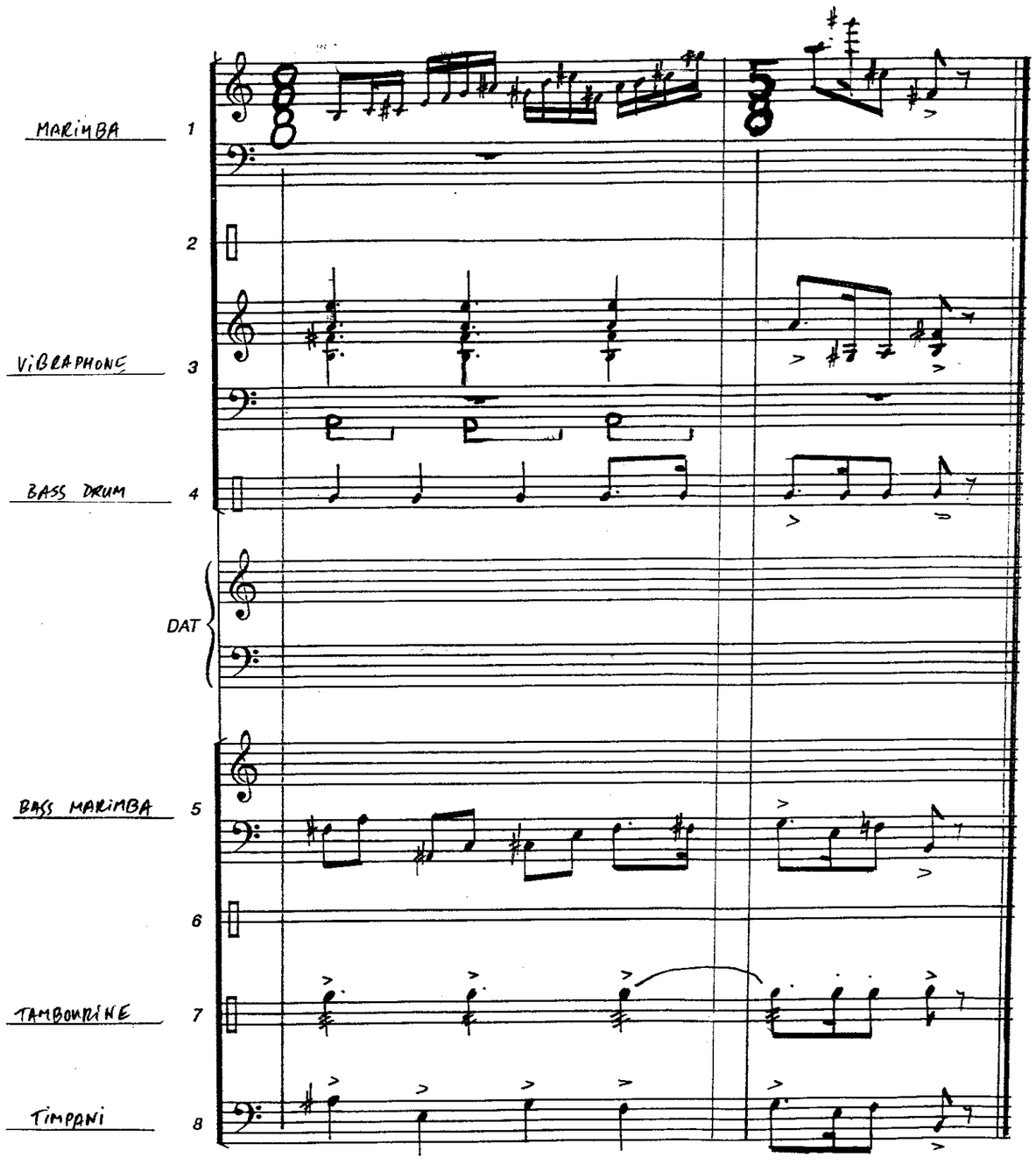
TAMBOURINE 7

TIMPANI 8

p

p

l.v.


MARIMBA
1
2
VIBRAPHONE
3
BASS DRUM
4
DAT
BASS MARIMBA
5
6
TAMBOURINE
7
TIMPANI
8

12

Elapsed Time

11:05 11:10 11:15 11:20

1

WOODBLOCK 2

mf

3

TOM-TOMS 4

1-1

DAT

mp mp

p

LOG DRUM 5

6

BONGOS 7

ROTO-TOMS 8

Elapsed Time

11:22 11:27 11:32 11:37

1

WOOD BLOCK 2

3

TOM-TOMS 4

1-2

1-3

mf f mf

DAT

mp

(hand mallets)

LOG DRUM 5

mf

6

BONGOS 7

ROTO-TOMS 8

11:39 11:44 11:49 11:54

Elapsed Time

1

WOOD BLOCK 2

3

TOM-TOMS 4

1-4 1-5

DAT

mp mp

LOG DRUM 5

6

BONGOS 7

mf f mf f mf

ROTO-TOMS 8

5 5

3 mf

Elapsed Time

11:56 12:01 12:06 12:11

XYLOPHONE 1

WOOD BLOCK 2

3

TOM-TOMS 4

2-1 2-2

DAT

LOG DRUM 5

6

BONGOS 7

ROTO-TOMS 8

12:13 12:18 12:23 12:28

Elapsed Time

XYLOPHONE 1

WOOD BLOCK 2

3

TOM-TOMS 4

2-3

2-4

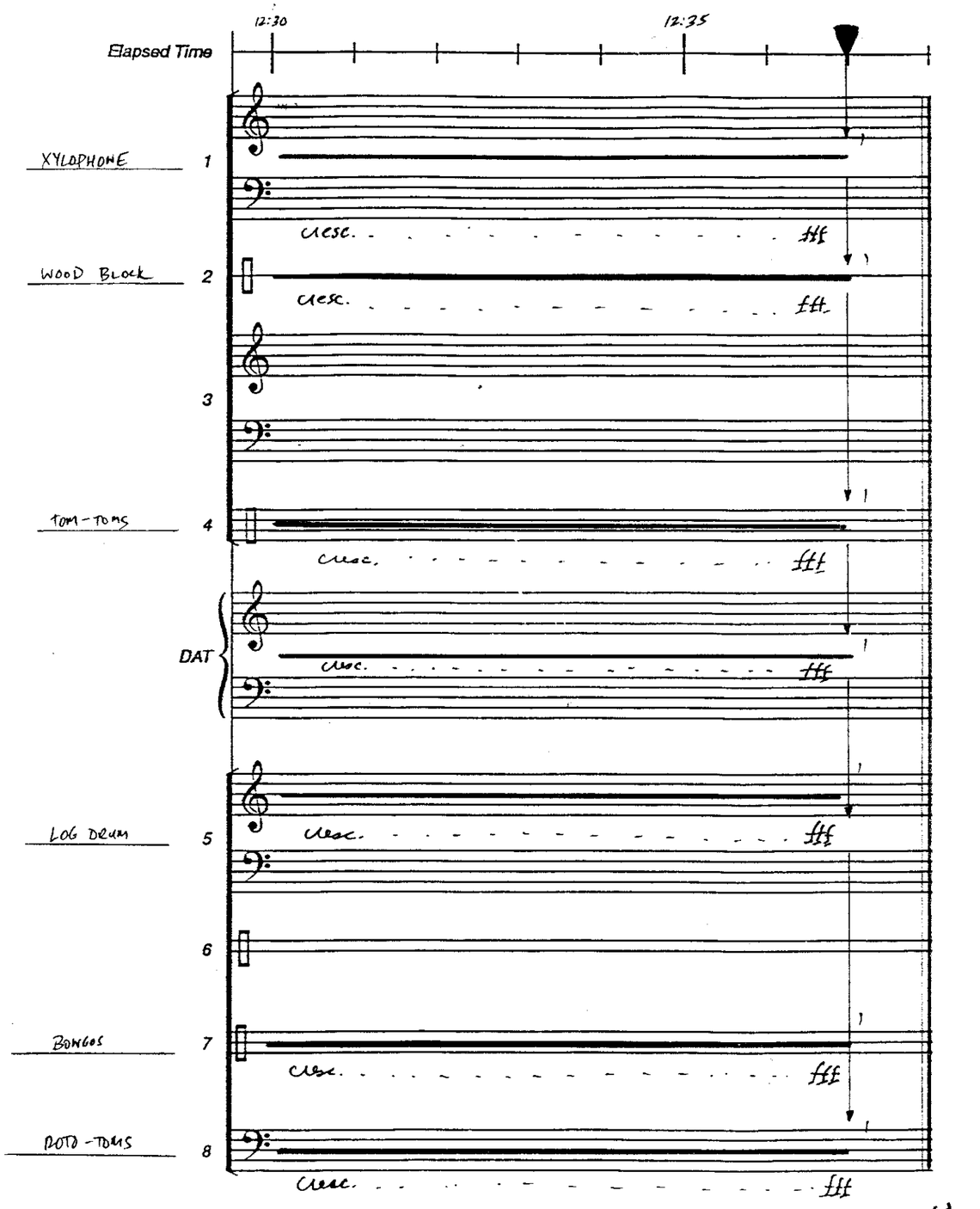
DAT

LOG DRUM 5

6

BONGOS 7

ROTO-TOMS 8


12:30
12:35
Elapsed Time
XYLOPHONE
1
cresc.
ff
WOOD BLOCK
2
cresc.
fff
3
TOM-TOMS
4
cresc.
fff
DAT
cresc.
fff
LOG DRUM
5
cresc.
fff
6
BONGOS
7
cresc.
fff
CONGA-TOMS
8
cresc.
fff

MYSTERIOUS, TIMELESS

13

Elapsed Time 12:45 12:50 12:55 13:00

MARIMBA 1

(med. rubber mallets)

(med. rubber mallets)

GLASS CHIMES/W. BLOCK 2

f

VIBRAPHONE (motor on fast) 3

(cord mallets) (soft)

f

pp

P

4

1-1

1-2

DAT

pp

mf

BASS MARIMBA 5

(soft yarn mallets)

(medium rattle mallets)

f

MED. SUSP. CYMBAL / TAM-TAM 6

7

8

Elapsed Time

13:02 13:07 13:12 13:17

MARIMBA 1

GLASS W. CHIMES 2

VIBRAPHONE 3

4

1-3 1-4 1-5

DAT

BASS MARIMBA 5

MED. SUSP. CYMBAL 6
TAM-TAM

7

8

mp

8va

(soft yarn mallets)

p

Elapsed Time

13:19 13:24 13:29 13:34

MARIMBA 1

GLASS W. CHIMES 2

VIBRAPHONE 3

4

2-1

DAT

BASS MARIMBA 5

MED. SUSP. CYMB. 6
TAM-TAM

7

8

Elapsed Time 13:36 13:41 13:46 13:51

MARIMBA 1

GLASS CHIMES 2

VIBRAPHONE 3

4

2-2 2-3 2-4

DAT

BASS MARIMBA 5

SUSP. CYMBAL 6
TAM-TAM

7

8

(Tam-Tam)

Elapsed Time 13:53 13:58 14:03 14:07

MARIMBA 1

GLASS CHIMES 2

VIBRAPHONE 3

4

DAT

BASS MARIMBA 5

SUSP. CYMBAL

TAM-TAM 6

7

8

(stopped w/left hand), pp

(WOOD BLOCK)

2-5

PP

PPP

(stopped w/left hand) pp

mf pp