

SOMNOPHONOGRAPHY

Vincent Cox



VERCLANKING

SOMNOPHONOGRAPHY

VERKLANKING VAN DE SLAAP



Wake

Beta golven >13 Hz, lage amplitude, zeer onregelmatig

"The hurry and excitement of modern life is held to be responsible for much of the insomnia of which we hear; and most of the articles and letters are full of good advice to live more quietly and of platitudes concerning the harmfulness of rush and worry. The pity of it is that so many people are unable to follow this good advice and are more obliged to lead a life of anxiety and high tension."

Anonymous, British Medical Journal, 1894



Drowsiness

Alpha golven 8-12 Hz, lage amplitude; regelmatiger dan wake, gepaard met Slow Eye Movements.

"The worst thing in the world is to try to sleep and not to."

F. Scott Fitzgerald

In Somnophonography wordt één slaapcyclus verklankt.

Een slaapcyclus bestaat uit verschillende fasen die gekenmerkt worden door veranderingen in hersenactiviteit en oogbewegingen. Eén slaapcyclus duurt normaalgesproken ongeveer 90 minuten en wordt gedurende een nacht drie tot vijf keer doorlopen. Na een periode van waak en slaperigheid treedt de lichte slaap in. Tijdens de periode van waak en slaperigheid zijn fragmenten gebruikt van het alom bekende 'Slaap kindje slaap'. Deze fragmenten komen later terug in de droomfase. Verder worden in de slaperigheidfase zogenaamde Slow Eye Movements, trage horizontale bewegingen van de ogen, verklankt door glissandi van meerdere instrumenten.



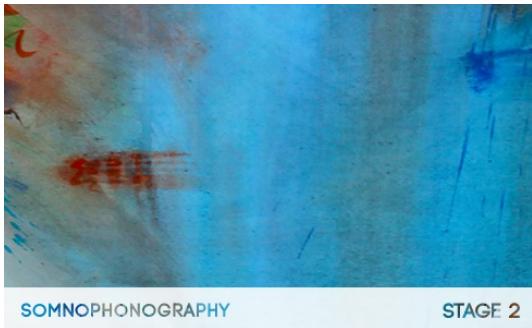
Stage 1

Theta golven 3-7 Hz, hogere amplitude dan drowsiness; enkele 'vertex' waves: plotselinge scherpe positieve pieken

“Now, blessings light on him that first invented sleep! It covers a man all over, thoughts and all, like a cloak; it is meat for the hungry, drink for the thirsty, heat for the cold, and cold for the hot. It is the current coin that purchases all the pleasures of the world cheap, and the balance that sets the king and the shepherd, the fool and the wise man, even.”

Miguel de Cervantes, Don Quixote, 1605

De eerste fase van de lichte slaap wordt simpelweg 'stage 1 sleep' genoemd en kenmerkt zich door een nog relatief actief brein. Eén karakteristiek beeld van de hersenactiviteit in deze fase zijn de 'vertex waves', plotselinge scherpe positieve pieken. Dit wordt verklankt door een kleine solo van de gestemde gongs.



Stage 2

Theta golven 3-7 Hz: als in stage 1; karakteristiek in stage 2 zijn (i) 'sleep spindles': korte 12-14 Hz, 2-5 seconden durende 'bursts'; (ii) 'K complexes': scherpe, 0.5-2 Hz, 0.5 seconden durende positieve en negatieve pieken

“If sleep does not serve an absolutely vital function, then it is the biggest mistake the evolutionary process has ever made.”

Allen Rechtschaffen, 1978

Na enkele minuten raakt men al wat dieper in slaap, maar is nog steeds sprake van lichte slaap. In deze fase, stage 2 sleep genoemd, wordt de hersenactiviteit al wat rustiger wat het best zichtbaar is door zogenaamde K-complexen. Een K-complex is een langzame hersengolf die ervoor zorgt dat externe stimuli niet meer worden verwerkt door de hersenen en lijkt ook een rol te spelen bij geheugenvorming. Het K-complex wordt verklankt door middel van de lage klanken van pauken en marimba. Dat in deze fase echter nog geen sprake is van diepe slaap wordt het best zichtbaar door zogenaamde sleep spindles. Sleep spindles zijn korte uitbarstingen van snelle hersenactiviteit en worden in Somnophonography verklankt door hoge en snelle ‘metalen’ klanken van brakedrums.



Slow Wave Sleep

Delta golven 0.5-2 Hz: hoge amplitude.

Neuronen vuren in een sterk gesynchroniseerde manier (harmonisch)

“I have seen many cases of people groaning and shouting in their sleep, some who choke; others jump from their bed and run outside and remain out of their mind till they wake, when they are as healthy and sane as they were before, although perhaps rather pale and weak. These things are not isolated events but frequent occurrences. There are many other remarkable afflictions of various sorts, but it would take too long to describe them.”

Hippocrates, On the Sacred Disease

Na de twee lichte slaapfases treedt de diepe slaap in, Slow Wave Sleep, genoemd. In deze fase is er sprake van trage hersenactiviteit en kan de slaper relatief moeilijk wakker worden gemaakt. Deze fase wordt ook vaak de restorative slaapfase genoemd, wat inhoud dat men in deze slaapfase echt het lichaam en de hersenen aan het herstellen is. Verder lijkt onderzoek aan te tonen dat deze fase een essentiële rol speelt in het vormen van herinneringen. Het deel Slow Wave Sleep wordt uitsluitend verklankt door donkere klanken op marimba's die geleidelijk aan sterker worden in volume.



REM Sleep

Als in stage 1; alleen duidelijke snelle oogbewegingen. Lichaam vertoont geen spieractiviteit. In deze fase wordt veel gedroomd

"The best thing about dreams is that fleeting moment, when you are between asleep and awake, when you don't know the difference between reality and fantasy, when for just that one moment you feel with your entire soul that the dream is reality, and it really happened."

James Arthur Baldwin

Als laatste slaapfase komt de REM slaap aan bod. REM slaap, of Rapid Eye Movement sleep, kenmerkt zich door een relatieve actieve hersenactiviteit die veel gelijkenis vertoont met een wakker brein. Deze fase heeft zijn naam vanwege de snelle, onwillekeurige bewegingen van de ogen. Daarnaast zijn in deze fase de lichaamsspieren totaal ontspannen. REM slaap wordt ook droomslaap genoemd. Hoewel dromen in iedere slaapfase kunnen voorkomen, hebben slapers de meest uitvoerige herinnering van een droom die tijdens de REM slaap plaatsvond. REM slaap wordt, net als Slow Wave Sleep, gerelateerd aan geheugen. Hier wordt dan wel een sterkere relatie gemaakt met procedureel geheugen, ofwel het leren van vaardigheden, dan met herinneringen. Het dromerige karakter van deze fase wordt verklankt door het vrije tempo en de vrije dynamiek van een aantal partijen. Het abrupte einde moet het einde van een droom voorstellen dat veel mensen wel eens hebben ervaren: het gevoel van een val en het verschriften wakker worden.

Slaap lekker straks!

1. Wake

In Somnophonography wordt één slaapcyclus verklankt. Een slaapcyclus bestaat uit verschillende fasen die gekenmerkt worden door veranderingen in hersenactiviteit en oogbewegingen. Één slaapcyclus duurt normaal gesproken ongeveer 90 minuten en wordt gedurende een nacht drie tot vijf keer doorlopen.

2. Drowsiness

Na een periode van waak en slaperigheid treedt de lichte slaap in. Tijdens de periode van waak en slaperigheid zijn fragmenten gebruikt van het bekende 'Slaap kindje slaap'. Deze fragmenten komen later terug in de droomfase. Verder worden in de slaperigheidsfase zogenoemde Slow Eye Movements, trage horizontale bewegingen van de ogen, verklankt door glissandi van meerdere instrumenten.

5. Slow Wave Sleep

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4. Stage 2

Na enkele minuten raakt men al wat dieper in slaap, maar nog steeds sprake van lichte slaap. In deze fase, stage 2 sleep genoemd, wordt de hersenactiviteit al wat rustiger wat het best zichtbaar is door zogenoemde K-complexen. Een K-complex is een langzame hersengolf die ervoor zorgt dat externe stimuli niet meer worden verwerkt door de hersenen en lijkt ook een rol te spelen bij geheugenvervorming. Het K-complex wordt verklankt door middel van de lage klanken van pauken en marimba. Dat in deze fase echter nog geen sprake is van diepe slaap wordt het best zichtbaar door zogenoemde sleep spindles. Sleep spindles zijn korte uitbarstingen van snelle hersenactiviteit en worden in Somnophonography verklankt door hoge en snelle 'metaal' klanken van brakedrums.

6. Rapid Eye Movement

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3. Stage 1

De eerste fase van de lichte slaap wordt simpelweg 'stage 1 sleep' genoemd en kenmerkt zich door een nog relatief actief brein. Een karakteristiek beeld van de hersenactiviteit in deze fase zijn de 'vertex waves', plotselinge scherpe positieve pieken. Dit wordt verklankt door een kleine solo van de gestemde gongs.

Jan Ruigt 2015

schilderij: Jan Ruigt

SOMNOPHONOGRAPHY

*creative concept: Tim Leufkens
artistic elaboration: Frank Marx*

Vincent Cox

Sample 1 "Wake" $\text{♩} = 72$

t sample

Crotolas
Metal Tubes
Egg Shaker
Crystal Glass (A'', C'')
Glockenspiel
Metal tubes
Flexatone
Egg Shaker
Crystal Glass (G, B'')

Vibraphone 1
Metal Tubes
Marimba
Egg Cups
Vibraphone 2
Metal Tubes
Marimba
Crystal Glass (F'', A'')

Marimba 2
Metal Tubes
Sand Paper
Quartetone Gsp.
Bass Marimba
Tuned Cowbells
Sand Paper

Tubular Bells
Tuned Gongs
Timpani
Crotolas

Tub 2
Timp.26"
Log Drums
Tub 4
Timp.29"
4 Triangles
Tub 5
Timp.32"
Plastic Foil
Tub 1
Crystal Glass high
Aluminium Foil
3 Dobaci
Plastic Foil
Opera Gong
Tub 3
Crystal Glass Medium
Aluminium Foil
Watergong
Tub 6
Crystal Glass Low
Aluminium Foil
Belltree
Watergong
Suspended Cymbal
Chinese Cymbal
Tamtam

Thundersheet

Bass Drum
Thundersheet

SOMNOGRAPHY

6

Crot.
M.Tbs.
Egg Sh.
Cr.Gls.

Glsp.
M.Tbs.
Fl.T.
Egg Sh.
Cr.Gls.

Vib.1
M.Tbs.
Mar.
Egg Cups

Vib.2
M.Tbs.
Mar.
Q.Glsp.

Mar.2
M.Tbs.
S.Paper
Cr.Gls.

B.Mar.
Cw.Blls.
S.Paper

T.Bls.
Tnd.Gngs.

Timp.
Crot.

Tub 2, medium high, with
Edge → Cen
Timp. 26"
L.Dr.

Tub 4
Timp. 29"
4 Tri.

Tub 5
Timp. 32"
P.Foil

Tub 1
Cr.Gl.H
A.Foil
Dbc.
P.Foil
O.Gng.

Tub 3
Cr.Gl.M
A.Foil
W.Gng.

Tub 6
Cr.Gl.L
A.Foil
B.Tree
W.Gng.

S.Cym.
Ch.Cym.

Tam.

Th.Sht.

B.Dr.
Th.Sht.

Metal Tubes, soft mallets

10

Crot.
M.Tbs.
Egg Sh.
Cr.Gls.

Glsp.
M.Tbs.
Fl.T.
Egg Sh.
Cr.Gls.

Vib.1
M.Tbs.
Mar.
Egg Cups

Vib.2
M.Tbs.
Mar.
Q.Glsp.

Mar.2
M.Tbs.
S.Paper
Cr.Gls.

B.Mar.
Cw.Blls.
S.Paper

T.Bls.
Tnd.Gngs.

Timp.
Crot.

Tub 2
Timp. 26"
L.Dr.

Tub 4
Timp. 29"
4.Tri.

Tub 5
Timp. 32"
P.Foil

Tub 1
Cr.Gl.H
A.Foil
Dbc.
P.Foil
O.Gng.

Tub 3
Cr.Gl.M
A.Foil
W.Gng

Tub 6
Cr.Gl.L
A.Foil
B.Tree
W.Gng

S.Cym.
Ch.Cym.

Tam.

Th.Sht.

B.Dr.
Th.Sht.

Metal Tub

mp

co

Tuned C

Crotale, con arco c

simile

pp cresc. mp dim. pp

pp cresc. mp dim. pp

simile

pp cresc. mp dim. pp

pp

ppp < p

Suspended Cymbal, gliss. with triangle beater

pp

Tamtam, gliss. with triangle beater

pp

Thundersheet, with brushes

p dim.

Thundersheet, with mallets

p dim.

14

Crot.
M.Tbs.
Egg Sh.
Cr.Gls.

Glsp.
M.Tbs.
Fl.T.
Egg Sh.
Cr.Gls.

Vib.1
M.Tbs.
Mar.
Egg Cups

Vib.2
M.Tbs.
Mar.
Q.Glsp.

Mar.2
M.Tbs.
S.Paper
Cr.Gls.

B.Mar.
Cw.Blls.
S.Paper

T.Bls.
Tnd.Gngs.

Timp.
Crot.

Tub 2
Timp. 26"
L.Dr.

Tub 4
Timp. 29"
4.Tri.

Tub 5
Timp. 32"
P.Foil

Tub 1
Cr.Gl.H
A.Foil
Dbc.
P.Foil
O.Gng.

Tub 3
Cr.Gl.M
A.Foil
W.Gng

Tub 6
Cr.Gl.L
A.Foil
B.Tree
W.Gng

S.Cym.
Ch.Cym.

Tam.

Th.Sht.

B.Dr.
Th.Sht.

Metal Tubes, soft mallets

17

Crot.
M.Tbs.
Egg Sh.
Cr.Gls.

Glsp.
M.Tbs.
Fl.T.
Egg Sh.
Cr.Gls.

Vib.1
M.Tbs.
Mar.
Egg Cups

Vib.2
M.Tbs.
Mar.
Q.Gisp.

Mar.2
M.Tbs.
S.Paper
Cr.Gls.

B.Mar.
Cw.Blls.
S.Paper

T.Bls.
Tnd.Gngs.

Timp.
Crot.

Tub 2
Timp. 26"
L.Dr.

Tub 4
Timp. 29"
4 Tri.

Tub 5
Timp. 32"
P.Foil

Tub 1
Cr.Gl.H
A.Foil
Dbc.
P.Foil
O.Gng.

Tub 3
Cr.Gl.M
A.Foil
W.Gng

Tub 6
Cr.Gl.L
A.Foil
B.Tree
W.Gng

S.Cym.
Ch.Cym.

Tam.

Th.Sht.

B.Dr.
Th.Sht.

20

Crot.
M.Tbs.
Egg Sh.
Cr.Gls.

Glsp.
M.Tbs.
Fl.T.
Egg Sh.
Cr.Gls.

Vib.1
M.Tbs.
Mar.
Egg Cups

Vib.2
M.Tbs.
Mar.
Q.Glsp.

Mar.2
M.Tbs.
S.Paper
Cr.Gls.

B.Mar.
Cw.Blls.
S.Paper

T.Bls.
Tnd.Gngs.

Timp.
Crot.

Tub 2
Timp. 26"
L.Dr.

Tub 4
Timp. 29"
4.Tri.

Tub 5
Timp. 32"
P.Foil

Tub 1
Cr.Gl.H
A.Foil
Dbc.
P.Foil
O.Gng.

Tub 3
Cr.Gl.M
A.Foil
W.Gng

Tub 6
Cr.Gl.L
A.Foil
B.Tree
W.Gng

S.Cym.
Ch.Cym.

Tam.

Th.Sht.

B.Dr.
Th.Sht.

23

Crot.
M.Tbs.
Egg Sh.
Cr.Gls.

Glsp.
M.Tbs.
Fl.T.
Egg Sh.
Cr.Gls.

Vib.1
M.Tbs.
Mar.
Egg Cups

Vib.2
M.Tbs.
Mar.
Q.Glsp.

Mar.2
M.Tbs.
S.Paper
Cr.Gls.

B.Mar.
Cw.Blls.
S.Paper

T.Bls.
Tnd.Gngs.

Timp.
Crot.

Tub 2
Timp. 26"
L.Dr.

Tub 4
Timp. 29"
4.Tri.

Tub 5
Timp. 32"
P.Foil

Tub 1
Cr.Gl.H
A.Foil
Dbc.
P.Foil
O.Gng.

Tub 3
Cr.Gl.M
A.Foil
W.Gng

Tub 6
Cr.Gl.L
A.Foil
B.Tree
W.Gng

S.Cym.
Ch.Cym.

Tam.

Th.Sht.

B.Dr.
Th.Sht.

SONNOGRAPHY

Crotales, *con arco* (*ad lib.* 2 players)

l.v.

26

Crot.
M.Tbs.
Egg Sh.
Cr.Gls.

Glsp.
M.Tbs.
Fl.T.
Egg Sh.
Cr.Gls.

Vib.1
M.Tbs.
Mar.
Egg Cups

Vib.2
M.Tbs.
Mar.
Q.Glsp.

Mar.2
M.Tbs.
S.Paper
Cr.Gls.

B.Mar.
Cw.Blls.
S.Paper

T.Bls.
Tnd.Gngs.

Timp.
Crot.

Tub 2
Timp. 26"
L.Dr.

Tub 4
Timp. 29"
4.Tri.

Tub 5
Timp. 32"
P.Foil

Tub 1
Cr.Gl.H
A.Foil
Dbc.
P.Foil
O.Gng.

Tub 3
Cr.Gl.M
A.Foil
W.Gng

Tub 6
Cr.Gl.L
A.Foil
B.Tree
W.Gng

S.Cym.
Ch.Cym.

Tam.

Th.Sht.

B.Dr.
Th.Sht.

SONNOGRAPHY

31

Crot.
M.Tbs.
Egg Sh.
Cr.Gls.

Glsp.
M.Tbs.
Fl.T.
Egg Sh.
Cr.Gls.

Vib.1
M.Tbs.
Mar.
Egg Cups

Vib.2
M.Tbs.
Mar.
Q.Glsp.

Mar.2
M.Tbs.
S.Paper
Cr.Gls.

B.Mar.
Cw.Blls.
S.Paper

T.Bls.
Tnd.Gngs.

Timp.
Crot.

Tub 2
Timp. 26"
L.Dr.

(Centre) simile

mf *p cresc. mf*

Tub 4
Timp. 29"
4.Tri.

(Edge) (Centr)

mf dim. p

Tub 5
Timp. 32"
P.Foil

(Centre)

mf dim.

Tub 1
Cr.Gl.H
A.Foil
Dbc.
P.Foil
O.Gng.

> *ppp < p*

Tub 3
Cr.Gl.M
A.Foil
W.Gng

pj

Tub 6
Cr.Gl.L
A.Foil
B.Tree
W.Gng

ppp < p

S.Cym.
Ch.Cym.

Tam.

Th.Sht.

m.

pp

pp cresc. mp dim.

pp cresc. mp dim.

pp cresc. mp dim.

SONNOGRAPHY

35

Crot.
M.Tbs.
Egg Sh.
Cr.Gls.

Gisp.
M.Tbs.
Fl.T.
Egg Sh.
Cr.Gls.

Vib.1
M.Tbs.
Mar.
Egg Cups

Vib.2
M.Tbs.
Mar.
Q.Gisp.

Mar.2
M.Tbs.
S.Paper
Cr.Gls.

B.Mar.
Cw.Blls.
S.Paper

T.Bls.
Tnd.Gngs.

Timp.
Crot.

Tub 2
Timp. 26"
L.Dr.

Tub 4
Timp. 29"
4 Tri.

Tub 5
Timp. 32"
P.Foil

Tub 1
Cr.Gl.H
A.Foil
Dbc.
P.Foil
O.Gng.

Tub 3
Cr.Gl.M
A.Foil
W.Gng

Tub 6
Cr.Gl.L
A.Foil
B.Tree
W.Gng

S.Cym.
Ch.Cym.

Tam.

Th.Sht.

B.Dr.
Th.Sht.

Dynamics and performance instructions visible on the page include:

- Tub 2 (Timp. 26", L.Dr.):** *p p cresc. mf*, *f dim.*, *mf dim.*
- Tub 4 (Timp. 29", 4 Tri.):** *nf*, *mp 5 dim.*
- Tub 5 (Timp. 32", P.Foil):** *mp 5 dim. cresc. f*, *mp 5 dim.*
- Tub 1 (Cr.Gl.H, A.Foil, Dbc., P.Foil, O.Gng.):** *> ppp < p*, *ppp p*
- Tub 3 (Cr.Gl.M, A.Foil, W.Gng):** *ppp p*, *ppp p*, *ppp p*, *ppp p*
- Tub 6 (Cr.Gl.L, A.Foil, B.Tree, W.Gng):** *- ppp p*, *ppp < p*, *ppp < p*
- S.Cym. Ch.Cym. Tam.:** *- - -*
- Th.Sht. (B.Dr. Th.Sht.):** *f pp pp cresc. mp dim. pp pp cresc. mp dim. pp pp cresc. mp dim. pp*

SOMNOGRAPHY

40

Crot.
M.Tbs.
Egg Sh.
Cr.Gls.

Gisp.
M.Tbs.
Fl.T.
Egg Sh.
Cr.Gls.

Vib.1
M.Tbs.
Mar.
Egg Cups

Vib.2
M.Tbs.
Mar.
Q.Gisp.

Mar.2
M.Tbs.
S.Paper
Cr.Gls.

B.Mar.
Cw.Blls.
S.Paper

T.Bls.
Tnd.Gngs.

Timp.
Crot.

Tub 2
Timp. 26"
L.Dr.

Tub 4
Timp. 29"
4.Tri.

Tub 5
Timp. 32"
P.Foil

Tub 1
Cr.Gl.H
A.Foil
Dbc.
P.Foil
O.Gng.

Tub 3
Cr.Gl.M
A.Foil
W.Gng

Tub 6
Cr.Gl.L
A.Foil
B.Tree
W.Gng

S.Cym.
Ch.Cym.

Tam.

Th.Sht.

B.Dr.
Th.Sht.

47

Crot.
M.Tbs.
Egg Sh.
Cr.Gls.

Glsp.
M.Tbs.
Fl.T.
Egg Sh.
Cr.Gls.

Vib.1
M.Tbs.
Mar.
Egg Cups

Vib.2
M.Tbs.
Mar.
Q.Glsp.

Mar.2
M.Tbs.
S.Paper
Cr.Gls.

B.Mar.
Cw.Blls.
S.Paper

T.Bls.
Tnd.Gngs.

Timp.
Crot.

Tub 2
Timp. 26"
L.Dr.

Tub 4
Timp. 29"
4.Tri.

Tub 5
Timp. 32"
P.Foil

Tub 1
Cr.Gl.H
A.Foil
Dbc.
P.Foil
O.Gng.

Tub 3
Cr.Gl.M
A.Foil
W.Gng

Tub 6
Cr.Gl.L
A.Foil
B.Tree
W.Gng

S.Cym.
Ch.Cym.

Tam.

Th.Sht.

B.Dr.
Th.Sht.

Sample 2 + Narrator

"Drowsiness"

Crotales
f

kenspiel

, medium mallets

raphone, motor on, medium mallets
f

Marimba
mf dim.

Marimba
mf dim.

Tubular Bells
mf dim.

Timpani 23", (4 players) lowest possible tension
ppp

Timpani 26", (4 players) lowest possible tension
ppp

Timpani 29", (4 players) lowest possible tension
ppp

Timpani 32", (4 players) lowest possible tension
ppp

Opera Gong
f

Suspended Cymbal, soft mallets
mf dim.

Tamtam, scratch with metal beater
mf

Thundersheet
mf dim.

Bass Drum, normal beaters
mf dim.

poco rit.

Crot. l.v.
M.Tbs.
Egg Sh.
Cr.Gls.

Glsp. l.v.
M.Tbs.
Fl.T.
Egg Sh.
Cr.Gls.

Vib.1 l.v.
M.Tbs.
Mar.
Egg Cups

Vib.2 M.Tbs.
Mar.
Q.Glsp.

Mar.2 M.Tbs.
S.Paper
Cr.Gls.

B.Mar. Cw.Blls.
S.Paper

T.Bls. Tnd.Gngs.

Timp. Crot.

Tub 2 Timp. 26"
L.Dr.

Tub 4 Timp. 29"
4.Tri.

Tub 5 Timp. 32"
P.Foil

Tub 1 Cr.Gl.H
A.Foil
Dbc.
P.Foil
O.Gng.

Tub 3 Cr.Gl.M
A.Foil
W.Gng

Tub 6 Cr.Gl.L
A.Foil
B.Tree
W.Gng

S.Cym. Ch.Cym.

Tam.

Th.Sht.

B.Dr. Th.Sht.

SONNOGRAPHY

A tempo ♩=66

poco rit.

l.v.

Crot.
M.Tbs.
Egg Sh.
Cr.Gls.

Glsp.
M.Tbs.
Fl.T.
Egg Sh.
Cr.Gls.

Vib.1
M.Tbs.
Mar.
Egg Cups

Vib.2
M.Tbs.
Mar.
Q.Glsp.

Mar.2
M.Tbs.
S.Paper
Cr.Gls.

B.Mar.
Cw.Blls.
S.Paper

T.Bls.
Tnd.Gngs.

Timp.
Crot.

Tub 2
Timp. 26"
L.Dr.

Tub 4
Timp. 29"
4.Tri.

Tub 5
Timp. 32"
P.Foil

Tub 1
Cr.Gl.H
A.Foil
Dbc.
P.Foil
O.Gng.

Tub 3
Cr.Gl.M
A.Foil
W.Gng

Tub 6
Cr.Gl.L
A.Foil
B.Tree
W.Gng

S.Cym.
Ch.Cym.

Tam.

Th.Sht.

B.Dr.
Th.Sht.



mf dim.

l.v.

mf dim.

mf dim.

lowest possible tension

pp

lowest possible tension

pp

lowest possible tension

pp

lowest possible tension

pp

Opera Gong

f

dim.

ppp

l.v.

poco cresc.

l.v.

poco cresc.

l.v.

gliss.

l.v.

ppp

*Crystal Glass High, gliss. up using waterbowl.
Play with mallet and lift glass out of the water*

*Crystal Glass medium, gliss. up using waterbowl.
Play with mallet and lift glass out of the water*

*Crystal Glass Low, gliss. up using waterbowl.
Play with mallet and lift glass out of the water*

ppp

dim.

mf dim.

ppp

ppp

A tempo ♩=66

58 Crotale, con arco *l.v.*

Crot.
M.Tbs.
Egg Sh.
Cr.Gls.

Gisp.
M.Tbs.
Fl.T.
Egg Sh.
Cr.Gls.

Vib.1 motor on slow, soft mallets
M.Tbs.
Mar.
Egg Cups

Vib.2 motor on slow, soft mallets
M.Tbs.
Mar.
Q.Glsp.

Mar.2
M.Tbs.
S.Paper
Cr.Gls.

B.Mar.
Cw.Blls.
S.Paper

T.Bls.
Tnd.Gngs.

Timp.
Crot.

Tub 2
Timp. 26"
L.Dr.

Tub 4
Timp. 29"
4.Tri.

Tub 5
Timp. 32"
P.Foil

Tub 1
Cr.Gl.H
A.Foil
Dbc.
P.Foil
O.Gng.

Tub 3
Cr.Gl.M
A.Foil
W.Gng

Tub 6
Cr.Gl.L
A.Foil
B.Tree
W.Gng

S.Cym.
Ch.Cym.

Tam.

Th.Sht.

B.Dr.
Th.Sht.

Thundersheet
with polystyrene, circular movement

p *pp* *mp* *pp* *mp* *pp* *mp* *pp* *mp*

66

Crot.
M.Tbs.
Egg Sh.
Cr.Gls.

Glsp.
M.Tbs.
Fl.T.
Egg Sh.
Cr.Gls.

Vib.1
M.Tbs.
Mar.
Egg Cups

Vib.2
M.Tbs.
Mar.
Q.Glsp.

Mar.2
M.Tbs.
S.Paper
Cr.Gls.

B.Mar.
Cw.Blls.
S.Paper

T.Bls.
Tnd.Gngs.

Timp.
Crot.

Tub 2
Timp. 26"
L.Dr.

Tub 4
Timp. 29"
4.Tri.

Tub 5
Timp. 32"
P.Foil

Tub 1
Cr.Gl.H
A.Foil
Dbc.
P.Foil
O.Gng.

Tub 3
Cr.Gl.M
A.Foil
W.Gng

Tub 6
Cr.Gl.L
A.Foil
B.Tree
W.Gng

S.Cym.
Ch.Cym.

Tam.

Th.Sht.

B.Dr.
Th.Sht.

gliss.

pp dim.

pp < mp

SOMNOGRAPHY

The page contains musical staves for numerous percussion instruments, each with specific performance instructions:

- Crot. M.Tbs. Egg Sh. Cr.Gls.**: Crotal, Medium-Tone Bass, Egg Shaker, Crash Cymbal. Measure 75: Crotal sustained with a dot, Medium-Tone Bass eighth-note pairs, Egg Shaker eighth-note pairs, Crash Cymbal eighth-note pairs.
- Glsp. M.Tbs. Fl.T. Egg Sh. Cr.Gls.**: Glissando, Medium-Tone Bass, Flute Tremolo, Egg Shaker, Crash Cymbal. Measure 75: Glissando, Medium-Tone Bass eighth-note pairs, Flute Tremolo eighth-note pairs, Egg Shaker eighth-note pairs, Crash Cymbal eighth-note pairs.
- Vib.1 M.Tbs. Mar. Egg Cups**: Vibraphone 1, Medium-Tone Bass, Marimba, Egg Cups. Measure 75: Vibraphone 1 eighth-note pairs, Medium-Tone Bass eighth-note pairs, Marimba eighth-note pairs, Egg Cups eighth-note pairs.
- Vib.2 M.Tbs. Mar. Q.Glsp.**: Vibraphone 2, Medium-Tone Bass, Marimba, Quinte Glockenspiel. Measure 75: Vibraphone 2 eighth-note pairs, Medium-Tone Bass eighth-note pairs, Marimba eighth-note pairs, Quinte Glockenspiel eighth-note pairs.
- Mar.2 M.Tbs. S.Paper Cr.Gls.**: Marimba 2, Medium-Tone Bass, Soft Paper, Crash Cymbal. Measure 75: Marimba 2 eighth-note pairs, Medium-Tone Bass eighth-note pairs, Soft Paper eighth-note pairs, Crash Cymbal eighth-note pairs.
- B.Mar. Cw.Blls. S.Paper**: Bass Marimba, Cello/Bass Marimba, Soft Paper. Measure 75: Bass Marimba eighth-note pairs, Cello/Bass Marimba eighth-note pairs, Soft Paper eighth-note pairs.
- T.Bls. Tnd.Gngs.**: Tambourine/Bells, Tongue/Gong. Measure 75: Tambourine/Bells eighth-note pairs, Tongue/Gong eighth-note pairs.
- Timp. Crot.**: Timpani, Crotal. Measure 75: Timpani eighth-note pairs, Crotal eighth-note pairs.
- Tub 2 Timp. 26" L.Dr.**: Bass Trombone 2, Timpani 26", Large Drum. Measure 75: Bass Trombone 2 eighth-note pairs, Timpani 26" eighth-note pairs, Large Drum eighth-note pairs.
- Tub 4 Timp. 29" 4.Tri.**: Bass Trombone 4, Timpani 29", Four Triangle. Measure 75: Bass Trombone 4 eighth-note pairs, Timpani 29" eighth-note pairs, Four Triangle eighth-note pairs.
- Tub 5 Timp. 32" P.Foil**: Bass Trombone 5, Timpani 32", Paper Foil. Measure 75: Bass Trombone 5 eighth-note pairs, Timpani 32" eighth-note pairs, Paper Foil eighth-note pairs.
- Tub 1 Cr.Gl.H A.Foil Dbc. P.Foil O.Gng.**: Bass Trombone 1, Crash/Glocken, Aluminum Foil, Double Bass/Cello, Paper Foil, Opera Gong. Measure 75: Bass Trombone 1 eighth-note pairs, Crash/Glocken eighth-note pairs, Aluminum Foil eighth-note pairs, Double Bass/Cello eighth-note pairs, Paper Foil eighth-note pairs, Opera Gong eighth-note pairs.
- Tub 3 Cr.Gl.M A.Foil W.Gng**: Bass Trombone 3, Crash/Glocken, Aluminum Foil, Wind Gong. Measure 75: Bass Trombone 3 eighth-note pairs, Crash/Glocken eighth-note pairs, Aluminum Foil eighth-note pairs, Wind Gong eighth-note pairs.
- Tub 6 Cr.Gl.L A.Foil B.Tree W.Gng**: Bass Trombone 6, Crash/Glocken, Aluminum Foil, Bass Tree, Wind Gong. Measure 75: Bass Trombone 6 eighth-note pairs, Crash/Glocken eighth-note pairs, Aluminum Foil eighth-note pairs, Bass Tree eighth-note pairs, Wind Gong eighth-note pairs.
- S.Cym. Ch.Cym.**: Suspended Cymbal, China Cymbal. Measure 75: Suspended Cymbal eighth-note pairs, China Cymbal eighth-note pairs.
- Tam.**: Tam-tam. Measure 75: Tam-tam eighth-note pairs.
- Th.Sht.**: Thumper Shutter. Measure 75: Thumper Shutter eighth-note pairs.
- B.Dr. Th.Sht.**: Bass Drum, Thumper Shutter. Measure 75: Bass Drum eighth-note pairs, Thumper Shutter eighth-note pairs.
- Crotales, mallets**: Crotal, Mallets. Measure 75: Crotal sustained with a dot, Mallets eighth-note pairs.
- f**: Fortissimo dynamic.
- glockenspiel**: Glockenspiel.
- motor on, medium mallets**: Motor on, Medium Mallets.
- Vibrphone, motor on, medium mallets**: Vibrphone, Motor on, Medium Mallets. Measure 75: Vibrphone eighth-note pairs, Motor on eighth-note pairs, Medium Mallets eighth-note pairs.
- Marimba**: Marimba. Measure 75: Marimba eighth-note pairs.
- mf dim.**: Mezzo-forte dynamic, Diminution.
- possible pitch**: Possible Pitch.
- lowest possible tension**: Lowest Possible Tension.
- highest possible pitch**: Highest Possible Pitch.
- lowest possible tension**: Lowest Possible Tension.
- gliss.**: Glissando.
- p**: Pianissimo dynamic.
- pp**: Pianississimo dynamic.
- Opera Gong**: Opera Gong.
- f**: Fortissimo dynamic.
- mf dim.**: Mezzo-forte dynamic, Diminution.
- mf**: Mezzo-forte dynamic.
- Suspended Cymbal, soft mallets**: Suspended Cymbal, Soft Mallets.
- mf dim.**: Mezzo-forte dynamic, Diminution.
- mf**: Mezzo-forte dynamic.
- pp < mp**: Pianississimo dynamic followed by Mezzo-forte dynamic.
- mf dim.**: Mezzo-forte dynamic, Diminution.
- Bass Drum, normal mallets**: Bass Drum, Normal Mallets.
- mf dim.**: Mezzo-forte dynamic, Diminution.

Sample 3

"Stage 1"

l=60

Crot.
M.Tbs.
Egg Sh.
Cr.Gls.

Glsp.
M.Tbs.
Fl.T.
Egg Sh.
Cr.Gls.

Vib.1
M.Tbs.
Mar.
Egg Cups

Vib.2
M.Tbs.
Mar.
Q.Gisp.

Mar.2
M.Tbs.
S.Paper
Cr.Gls.

B.Mar.
Cw.Blls.
S.Paper

T.Bls.
Tnd.Gngs.

Timp.
Crot.

Tub 2
Timp. 26"
L.Dr.

Tub 4
Timp. 29"
4 Tri.

Tub 5
Timp. 32"
P.Foil

Tub 1
Cr.Gl.H
A.Foil
Dbc.
P.Foil
O.Gng.

Tub 3
Cr.Gl.M
A.Foil
W.Gng

Tub 6
Cr.Gl.L
A.Foil
B.Tree
W.Gng

S.Cym.
Ch.Cym.

Tam.

Th.Sht.

B.Dr.
Th.Sht.

95

Crot.
M.Tbs.
Egg Sh.
Cr.Gls.

Glsp.
M.Tbs.
Fl.T.
Egg Sh.
Cr.Gls.

Vib.1
M.Tbs.
Mar.
Egg Cups

Vib.2
M.Tbs.
Mar.
Q.Glsp.

Mar.2
M.Tbs.
S.Paper
Cr.Gls.

B.Mar.
Cw.Blls.
S.Paper

T.Bls.
Tnd.Gngs.

Timp.
Crot.

Tub 2
Timp. 26"
L.Dr.

Tub 4
Timp. 29"
4 Tri.

Tub 5
Timp. 32"
P.Foil

Tub 1
Cr.Gl.H
A.Foil
Dbc.
P.Foil
O.Gng.

Tub 3
Cr.Gl.M
A.Foil
W.Gng

Tub 6
Cr.Gl.L
A.Foil
B.Tree
W.Gng

S.Cym.
Ch.Cym.

Tam.

Th.Sht.

B.Dr.
Th.Sht.

101

Crot.
M.Tbs.
Egg Sh.
Cr.Gls.

Glsp.
M.Tbs.
Fl.T.
Egg Sh.
Cr.Gls.

Vib.1
M.Tbs.
Mar.
Egg Cups

Vib.2
M.Tbs.
Mar.
Q.Glsp.

Mar.2
M.Tbs.
S.Paper
Cr.Gls.

B.Mar.
Cw.Blls.
S.Paper

T.Bls.
Tnd.Gngs.

Timp.
Crot.

Tub 2
Timp. 26"
L.Dr.

Tub 4
Timp. 29"
4 Tri.

Tub 5
Timp. 32"
P.Foil

Tub 1
Cr.Gl.H
A.Foil
Dbc.
P.Foil
O.Gng.

Tub 3
Cr.Gl.M
A.Foil
W.Gng

Tub 6
Cr.Gl.L
A.Foil
B.Tree
W.Gng

S.Cym.
Ch.Cym.

Tam.

Th.
Th.Sht.

B.Dr.
Th.Sht.

Eggshaker

simile *l.v.*
p cresc. *f*

simile *l.v.*
p cresc. *f*

Sandpaper

Sandpaper

p

gliss. *gliss.*

Aluminiumfoil, tremolo w
mp dim.

Alur

fingers
mp dim.

play with brushes
p mf >

play with brushes
p mf >

s
p dim. *p cresc.* *mf dim.* *pp cresc.* *mp dim.* *p cresc.* *mf dim.*

scratch
pp cresc. *mf dim.*

105

Crot.
M.Tbs.
Egg Sh.
Cr.Gls.

Glsp.
M.Tbs.
Fl.T.
Egg Sh.
Cr.Gls.

Vib.1
M.Tbs.
Mar.
Egg Cups

Vib.2
M.Tbs.
Mar.
Q.Glsp.

Mar.2
M.Tbs.
S.Paper
Cr.Gls.

B.Mar.
Cw.Blls.
S.Paper

T.Bls.
Tnd.Gngs.

Timp.
Crot.

Tub 2
Timp. 26"
L.Dr.

Tub 4
Timp. 29"
4.Tri.

Tub 5
Timp. 32"
P.Foil

Tub 1
Cr.Gl.H
A.Foil
Dbc.
P.Foil
O.Gng.

Tub 3
Cr.Gl.M
A.Foil
W.Gng

Tub 6
Cr.Gl.L
A.Foil
B.Tree
W.Gng

S.Cym.
Ch.Cym.

Tam.

Th.Sht.

B.Dr.
Th.Sht.

SONNOGRAPHY

110

Crot.
M.Tbs.
Egg Sh.
Cr.Gls.

Glsp.
M.Tbs.
Fl.T.
Egg Sh.
Cr.Gls.

Vib.1
M.Tbs.
Mar.
Egg Cups

Vib.2
M.Tbs.
Mar.
Q.Glsp.

Mar.2
M.Tbs.
S.Paper
Cr.Gls.

B.Mar.
Cw.Blls.
S.Paper

T.Bls.
Tnd.Gngs.

Timp.
Crot.

Tub 2
Timp. 26"
L.Dr.

Tub 4
Timp. 29"
4.Tri.

Tub 5
Timp. 32"
P.Foil

Tub 1
Cr.Gl.H
A.Foil
Dbc.
P.Foil
O.Gng.

Tub 3
Cr.Gl.M
A.Foil
W.Gng

Tub 6
Cr.Gl.L
A.Foil
B.Tree
W.Gng

S.Cym.
Ch.Cym.

Tam.

Th.Sht.

B.Dr.
Th.Sht.

115

Crot.
M.Tbs.
Egg Sh.
Cr.Gls.

Glsp.
M.Tbs.
Fl.T.
Egg Sh.
Cr.Gls.

Vib.1
M.Tbs.
Mar.
Egg Cups

Vib.2
M.Tbs.
Mar.
Q.Glsp.

Mar.2
M.Tbs.
S.Paper
Cr.Gls.

B.Mar.
Cw.Blls.
S.Paper

T.Bls.
Tnd.Gngs.

Timp.
Crot.

Tub 2
Timp. 26"
L.Dr.

Tub 4
Timp. 29"
4 Tri.

Tub 5
Timp. 32"
P.Foil

Tub 1
Cr.Gl.H
A.Foil
Dbc.
P.Foil
O.Gng.

Tub 3
Cr.Gl.M
A.Foil
W.Gng

Tub 6
Cr.Gl.L
A.Foil
B.Tree
W.Gng

S.Cym.
Ch.Cym.

Tam.

Th.Sht.

B.Dr.
Th.Sht.

SONNOGRAPHY

120

Crot.
M.Tbs.
Egg Sh.
Cr.Gls.

Gisp.
M.Tbs.
Fl.T.
Egg Sh.
Cr.Gls.

Vib.1
M.Tbs.
Mar.
Egg Cups

Vib.2
M.Tbs.
Mar.
Q.Gisp.

Mar.2
M.Tbs.
S.Paper
Cr.Gls.

B.Mar.
Cw.Blls.
S.Paper

T.Bls.
Tnd.Gngs.

Timp.
Crot.

Tub 2
Timp. 26"
L.Dr.

Tub 4
Timp. 29"
4 Tri.

Tub 5
Timp. 32"
P.Foil

Tub 1
Cr.Gl.H
A.Foil
Dbc.
P.Foil
O.Gng.

Tub 3
Cr.Gl.M
A.Foil
W.Gng

Tub 6
Cr.Gl.L
A.Foil
B.Tree
W.Gng

S.Cym.
Ch.Cym.

Tam.

Th.Sht.

B.Dr.
Th.Sht.

motor on, slow, very soft mallets

pp non cresc.

Ped.

motor on, slow, very soft mallets

pp non cresc.

Ped.

l.v.

poco cresc.

l.v.

gliss.

l.v.

gliss.

l.v.

gliss.

l.v.

gliss.

l.v.

gliss.

l.v.

gliss.

l.v.

mp dim.

n

gliss. with thin triangle beater

p

p

p

with polystyrene, circular movement

pp

mf

pp

mf

SOMNOGRAPHY

126

Crot.
M.Tbs.
Egg Sh.
Cr.Gls.

Glsp.
M.Tbs.
Fl.T.
Egg Sh.
Cr.Gls.

Vib.1
M.Tbs.
Mar.
Egg Cups

Vib.2
M.Tbs.
Mar.
Q.Glsp.

Mar.2
M.Tbs.
S.Paper
Cr.Gls.

B.Mar.
Cw.Blls.
S.Paper

T.Bls.
Tnd.Gngs.

Timp.
Crot.

Tub 2
Timp. 26"
L.Dr.

Tub 4
Timp. 29"
4' Tri.

Tub 5
Timp. 32"
P.Foil

Tub 1
Cr.Gl.H
A.Foil
Dbc.
P.Foil
O.Gng.

Tub 3
Cr.Gl.M
A.Foil
W.Gng

Tub 6
Cr.Gl.L
A.Foil
B.Tree
W.Gng

S.Cym.
Ch.Cym.

Tam.

Th.Sht.

B.Dr.
Th.Sht.

Crotales, soft mallets
p pp
Glockenspiel, soft mallets
p pp

l.v.

p

p

mf

pp

mf

Sample 4 "Stage 2"
+ Narrator ↘=54

SOMNOPHONOGRAPHY

136

Crot.
M.Tbs.
Egg Sh.
Cr.Gls.

Glsp.
M.Tbs.
Fl.T.
Egg Sh.
Cr.Gls.

Vib.1
M.Tbs.
Mar.
Egg Cups

Vib.2
M.Tbs.
Mar.
Q.Glsp.

Mar.2
M.Tbs.
S.Paper
Cr.Gls.

B.Mar.
Cw.Blls.
S.Paper

T.Bls.
Tnd.Gngs.

Timp.
Crot.

Tub 2
Timp. 26"
L.Dr.

Tub 4
Timp. 29"
4'Tri.

Tub 5
Timp. 32"
P.Foil

Tub 1
Cr.Gl.H
A.Foil
Dbc.
P.Foil
O.Gng.

Tub 3
Cr.Gl.M
A.Foil
W.Gng

Tub 6
Cr.Gl.L
A.Foil
B.Tree
W.Gng

S.Cym.
Ch.Cym.

Tam.

Th.Sht.

B.Dr.
Th.Sht.

(accel.)
soft mallets

pp cresc.

pp

pp cresc.

pp dim.

mp dim.

pp

pp cresc.

SOMNOGRAPHY

140

Crot.
M.Tbs.
Egg Sh.
Cr.Gls.

Glsp.
M.Tbs.
Fl.T.
Egg Sh.
Cr.Gls.

Vib.1
M.Tbs.
Mar.
Egg Cups

Vib.2
M.Tbs.
Mar.
Q.Glsp.

Mar.2
M.Tbs.
S.Paper
Cr.Gls.

B.Mar.
Cw.Blls.
S.Paper

T.Bls.
Tnd.Gngs.

Timp.
Crot.

Tub 2
Timp. 26"
L.Dr.

Tub 4
Timp. 29"
4 Tri.

Tub 5
Timp. 32"
P.Foil

Tub 1
Cr.Gl.H
A.Foil
Dbc.
P.Foil
O.Gng.

Tub 3
Cr.Gl.M
A.Foil
W.Gng

Tub 6
Cr.Gl.L
A.Foil
B.Tree
W.Gng

S.Cym.
Ch.Cym.

Tam.

Th.Sht.

B.Dr.
Th.Sht.

soft mallets
(rit.)
l.v.

(accel.)
pp
mp di
mf
mf
mf dim.
lets
mf
mf dim.

con arco, motor on, fast

pp

mp dim.

pp cresc.

142 (rit.) *l.v.*

Crot.
M.Tbs.
Egg Sh.
Cr.Gls.

Glsp.
M.Tbs.
Fl.T.
Egg Sh.
Cr.Gls.

Vib.1
M.Tbs.
Mar.
Egg Cups

Vib.2
M.Tbs.
Mar.
Q.Glsp.

Mar.2
M.Tbs.
S.Paper
Cr.Gls.

B.Mar.
Cw.Blls.
S.Paper

T.Bls.
Tnd.Gngs.

Timp.
Crot.

Tub 2
Timp. 26"
L.Dr.

Tub 4
Timp. 29"
4 Tri.

Tub 5
Timp. 32"
P.Foil

Tub 1
Cr.Gl.H
A.Foil
Dbc.
P.Foil
O.Gng.

Tub 3
Cr.Gl.M
A.Foil
W.Gng

Tub 6
Cr.Gl.L
A.Foil
B.Tree
W.Gng

S.Cym.
Ch.Cym.

Tam.

Th.Sht.

B.Dr.
Th.Sht.

mp dim.

cresc.

pp

pp dim.

pp

144

Crot.
M.Tbs.
Egg Sh.
Cr.Gls.

Glsp.
M.Tbs.
Fl.T.
Egg Sh.
Cr.Gls.

Vib.1
M.Tbs.
Mar.
Egg Cups

Vib.2
M.Tbs.
Mar.
Q.Glsp.

Mar.2
M.Tbs.
S.Paper
Cr.Gls.

B.Mar.
Cw.Blls.
S.Paper

T.Bls.
Tnd.Gngs.

Timp.
Crot.

Tub 2
Timp. 26"
L.Dr.

Tub 4
Timp. 29"
4.Tri.

Tub 5
Timp. 32"
P.Foil

Tub 1
Cr.Gl.H
A.Foil
Dbc.
P.Foil
O.Gng.

Tub 3
Cr.Gl.M
A.Foil
W.Gng

Tub 6
Cr.Gl.L
A.Foil
B.Tree
W.Gng

S.Cym.
Ch.Cym.

Tam.

Th.Sht.

B.Dr.
Th.Sht.

147

Crot.
M.Tbs.
Egg Sh.
Cr.Gls.

Glsp.
M.Tbs.
Fl.T.
Egg Sh.
Cr.Gls.

Vib.1
M.Tbs.
Mar.
Egg Cups

Vib.2
M.Tbs.
Mar.
Q.Glsp.

Mar.2
M.Tbs.
S.Paper
Cr.Gls.

B.Mar.
Cw.Blls.
S.Paper

T.Bls.
Tnd.Gngs.

Timp.
Crot.

Tub 2
Timp. 26"
L.Dr.

Tub 4
Timp. 29"
4.Tri.

Tub 5
Timp. 32"
P.Foil

Tub 1
Cr.Gl.H
A.Foil
Dbc.
P.Foil
O.Gng.

Tub 3
Cr.Gl.M
A.Foil
W.Gng

Tub 6
Cr.Gl.L
A.Foil
B.Tree
W.Gng

S.Cym.
Ch.Cym.

Tam.

Th.Sht.

B.Dr.
Th.Sht.

con arco

(accel.)

pp cresc.

(rit.)

5 6 mp 5 dim.

mf dim.

pp

mf dim.

pp

cresc.

mp dim.

pp

pp cresc.

SOMNOGRAPHY

150

Crot.
M.Tbs.
Egg Sh.
Cr.Gls.

Glsp.
M.Tbs.
Fl.T.
Egg Sh.
Cr.Gls.

Vib.1
M.Tbs.
Mar.
Egg Cups

Vib.2
M.Tbs.
Mar.
Q.Glsp.

Mar.2
M.Tbs.
S.Paper
Cr.Gls.

B.Mar.
Cw.Blls.
S.Paper

T.Bls.
Tnd.Gngs.

Timp.
Crot.

Tub 2
Timp. 26"
L.Dr.

Tub 4
Timp. 29"
4.Tri.

Tub 5
Timp. 32"
P.Foil

Tub 1
Cr.Gl.H
A.Foil
Dbc.
P.Foil
O.Gng.

Tub 3
Cr.Gl.M
A.Foil
W.Gng

Tub 6
Cr.Gl.L
A.Foil
B.Tree
W.Gng

S.Cym.
Ch.Cym.

Tam.

Th.Sht.

B.Dr.
Th.Sht.

152

Crot.
M.Tbs.
Egg Sh.
Cr.Gls.

Glsp.
M.Tbs.
Fl.T.
Egg Sh.
Cr.Gls.

Vib.1
M.Tbs.
Mar.
Egg Cups

Vib.2
M.Tbs.
Mar.
Q.Glsp.

Mar.2
M.Tbs.
S.Paper
Cr.Gls.

B.Mar.
Cw.Blls.
S.Paper

T.Bls.
Tnd.Gngs.

Timp.
Crot.

Tub 2
Timp. 26"
L.Dr.

Tub 4
Timp. 29"
4.Tri.

Tub 5
Timp. 32"
P.Foil

Tub 1
Cr.Gl.H
A.Foil
Dbc.
P.Foil
O.Gng.

Tub 3
Cr.Gl.M
A.Foil
W.Gng

Tub 6
Cr.Gl.L
A.Foil
B.Tree
W.Gng

S.Cym.
Ch.Cym.

Tam.

Th.Sht.

B.Dr.
Th.Sht.

SONNOGRAPHY

154

Crot.
M.Tbs.
Egg Sh.
Cr.Gls.

Glsp.
M.Tbs.
Fl.T.
Egg Sh.
Cr.Gls.

Vib.1
M.Tbs.
Mar.
Egg Cups

Vib.2
M.Tbs.
Mar.
Q.Glsp.

Mar.2
M.Tbs.
S.Paper
Cr.Gls.

B.Mar.
Cw.Blls.
S.Paper

T.Bls.
Tnd.Gngs.

Timp.
Crot.

Tub 2
Timp. 26"
L.Dr.

Tub 4
Timp. 29"
4.Tri.

Tub 5
Timp. 32"
P.Foil

Tub 1
Cr.Gl.H
A.Foil
Dbc.
P.Foil
O.Gng.

Tub 3
Cr.Gl.M
A.Foil
W.Gng

Tub 6
Cr.Gl.L
A.Foil
B.Tree
W.Gng

S.Cym.
Ch.Cym.

Tam.

Th.Sht.

B.Dr.
Th.Sht.

soft mall

pp cresc.

pp

pp cresc.

resc.

mf

mp

mf

pp dim.

pp cresc.

157

Crot. M.Tbs. Egg Sh. Cr.Gls.

Glsp. M.Tbs. Fl.T. Egg Sh. Cr.Gls.

Vib.1 M.Tbs. Mar. Egg Cups

Vib.2 M.Tbs. Mar. Q.Glsp.

Mar.2 M.Tbs. S.Paper Cr.Gls.

B.Mar. Cw.Blls. S.Paper

T.Bls. Tnd.Gngs.

Timp. Crot.

Tub 2 Timp. 26" L.Dr.

Tub 4 Timp. 29" 4.Tri.

Tub 5 Timp. 32" P.Foil

Tub 1 Cr.Gl.H A.Foil Dbc. P.Foil O.Gng.

Tub 3 Cr.Gl.M A.Foil W.Gng

Tub 6 Cr.Gl.L A.Foil B.Tree W.Gng

S.Cym. Ch.Cym.

Tam.

Th.Sht.

B.Dr. Th.Sht.

soft mallets (accel.) *pp cresc.* 3 5 6 5 3 *mp dim.* *(rit.) v.*

con arco, motor on, fast *mf* *motor on, fast, wi* *mf*

(accel.) *mf di*

f dim. *pp*

mp dim. *pp*

mf

mf

mf

mf

mf

p

pp cresc. *mp dim.* *pp* *pp cresc.*

SOMNOGRAPHY

160

Crot.
M.Tbs.
Egg Sh.
Cr.Gls.

Glsp.
M.Tbs.
Fl.T.
Egg Sh.
Cr.Gls.

Vib.1
M.Tbs.
Mar.
Egg Cups

Vib.2
M.Tbs.
Mar.
Q.Glsp.

Mar.2
M.Tbs.
S.Paper
Cr.Gls.

B.Mar.
Cw.Blls.
S.Paper

T.Bls.
Tnd.Gngs.

Timp.
Crot.

Tub 2
Timp. 26"
L.Dr.

Tub 4
Timp. 29"
4.Tri.

Tub 5
Timp. 32"
P.Foil

Tub 1
Cr.Gl.H
A.Foil
Dbc.
P.Foil
O.Gng.

Tub 3
Cr.Gl.M
A.Foil
W.Gng

Tub 6
Cr.Gl.L
A.Foil
B.Tree
W.Gng

S.Cym.
Ch.Cym.

Tam.

Th.Sht.

B.Dr.
Th.Sht.

p

l.v.

mp dim.

pp

c.

mp dim.

pp

pp cresc.

162

Crot.
M.Tbs.
Egg Sh.
Cr.Gls.

Glsp.
M.Tbs.
Fl.T.
Egg Sh.
Cr.Gls.

Vib.1
M.Tbs.
Mar.
Egg Cups

Vib.2
M.Tbs.
Mar.
Q.Glsp.

Mar.2
M.Tbs.
S.Paper
Cr.Gls.

B.Mar.
Cw.Blls.
S.Paper

T.Bls.
Tnd.Gngs.

Timp.
Crot.

Tub 2
Timp. 26"
L.Dr.

Tub 4
Timp. 29"
4.Tri.

Tub 5
Timp. 32"
P.Foil

Tub 1
Cr.Gl.H
A.Foil
Dbc.
P.Foil
O.Gng.

Tub 3
Cr.Gl.M
A.Foil
W.Gng

Tub 6
Cr.Gl.L
A.Foil
B.Tree
W.Gng

S.Cym.
Ch.Cym.

Tam.

Th.Sht.

B.Dr.
Th.Sht.

SONNOGRAPHY

165 *l.v.*

Crot.
M.Tbs.
Egg Sh.
Cr.Gls.

Glsp.
M.Tbs.
Fl.T.
Egg Sh.
Cr.Gls.

Vib.1
M.Tbs.
Mar.
Egg Cups

Vib.2
M.Tbs.
Mar.
Q.Glsp.

Mar.2
M.Tbs.
S.Paper
Cr.Gls.

B.Mar.
Cw.Blls.
S.Paper

T.Bls.
Tnd.Gngs.

Timp.
Crot.

Tub 2
Timp. 26"
L.Dr.

Tub 4
Timp. 29"
4.Tri.

Tub 5
Timp. 32"
P.Foil

Tub 1
Cr.Gl.H
A.Foil
Dbc.
P.Foil
O.Gng.

Tub 3
Cr.Gl.M
A.Foil
W.Gng

Tub 6
Cr.Gl.L
A.Foil
B.Tree
W.Gng

S.Cym.
Ch.Cym.

Tam.

Th.Sht.

B.Dr.
Th.Sht.

mf dim. *pp* *dim.* *pp* *pp* *cresc.* *p* *dim.* *mp dim.* *pp* *pp cresc.* *p dim.* *dim.*

170

Crot.
M.Tbs.
Egg Sh.
Cr.Gls.

Glsp.
M.Tbs.
Fl.T.
Egg Sh.
Cr.Gls.

Vib.1
M.Tbs.
Mar.
Egg Cups

Vib.2
M.Tbs.
Mar.
Q.Glsp.

Mar.2
M.Tbs.
S.Paper
Cr.Gls.

B.Mar.
Cw.Blls.
S.Paper

T.Bls.
Tnd.Gngs.

Timp.
Crot.

Tub 2
Timp. 26"
L.Dr.

Tub 4
Timp. 29"
4.Tri.

Tub 5
Timp. 32"
P.Foil

Tub 1
Cr.Gl.H
A.Foil
Dbc.
P.Foil
O.Gng.

Tub 3
Cr.Gl.M
A.Foil
W.Gng

Tub 6
Cr.Gl.L
A.Foil
B.Tree
W.Gng

S.Cym.
Ch.Cym.

Tam.

Th.Sht.

B.Dr.
Th.Sht.

176

Crot.
M.Tbs.
Egg Sh.
Cr.Gls.

Glsp.
M.Tbs.
Fl.T.
Egg Sh.
Cr.Gls.

Vib.1
M.Tbs.
Mar.
Egg Cups

Vib.2
M.Tbs.
Mar.
Q.Glsp.

Mar.2
M.Tbs.
S.Paper
Cr.Gls.

B.Mar.
Cw.Blls.
S.Paper

T.Bls.
Tnd.Gngs.

Timp.
Crot.

Tub 2
Timp. 26"
L.Dr.

Tub 4
Timp. 29"
4.Tri.

Tub 5
Timp. 32"
P.Foil

Tub 1
Cr.Gl.H
A.Foil
Dbc.
P.Foil
O.Gng.

Tub 3
Cr.Gl.M
A.Foil
W.Gng

Tub 6
Cr.Gl.L
A.Foil
B.Tree
W.Gng

S.Cym.
Ch.Cym.

Tam.

Th.Sht.

B.Dr.
Th.Sht.

Sample 5 "Slow wave sleep"
+ Narrator $\text{♩} = 40$

183

Crot.
M.Tbs.
Egg Sh.
Cr.Gls.

Glsp.
M.Tbs.
Fl.T.
Egg Sh.
Cr.Gls.

Vib.1
M.Tbs.
Mar.
Egg Cups

Vib.2
M.Tbs.
Mar.
Q.Glsp.

Mar.2
M.Tbs.
S.Paper
Cr.Gls.

B.Mar.
Cw.Blls.
S.Paper

T.Bls.
Tnd.Gngs.

Timp.
Crot.

Tub 2
Timp. 26"
L.Dr.

Tub 4
Timp. 29"
4.Tri.

Tub 5
Timp. 32"
P.Foil

Tub 1
Cr.Gl.H
A.Foil
Dbc.
P.Foil
O.Gng.

Tub 3
Cr.Gl.M
A.Foil
W.Gng

Tub 6
Cr.Gl.L
A.Foil
B.Tree
W.Gng

S.Cym.
Ch.Cym.

Tam.

Th.Sht.

B.Dr.
Th.Sht.

(rit.)

l.v.

very soft mallets ad lib. 2 players

very soft mallets

pp

SO MNOPHONOGRAPHY

193

Crot.
M.Tbs.
Egg Sh.
Cr.Gls.

Glsp.
M.Tbs.
Fl.T.
Egg Sh.
Cr.Gls.

Vib.1
M.Tbs.
Mar.
Egg Cups

Vib.2
M.Tbs.
Mar.
Q.Glsp.

Mar.2
M.Tbs.
S.Paper
Cr.Gls.

B.Mar.
Cw.Blls.
S.Paper

T.Bls.
Tnd.Gngs.

Timp.
Crot.

Tub 2
Timp. 26"
L.Dr.

Tub 4
Timp. 29"
4.Tri.

Tub 5
Timp. 32"
P.Foil

Tub 1
Cr.Gl.H
A.Foil
Dbc.
P.Foil
O.Gng.

Tub 3
Cr.Gl.M
A.Foil
W.Gng

Tub 6
Cr.Gl.L
A.Foil
B.Tree
W.Gng

S.Cym.
Ch.Cym.

Tam.

Th.Sht.

B.Dr.
Th.Sht.

SOMNOGRAPHY

205

Crot.
M.Tbs.
Egg Sh.
Cr.Gls.

Glsp.
M.Tbs.
Fl.T.
Egg Sh.
Cr.Gls.

Vib.1
M.Tbs.
Mar.
Egg Cups

Marimba (*on A-Marimba*) *ad lib. 2 players*
very soft mallets

Vib.2
M.Tbs.
Mar.
Q.Glsp.

Mar.2
M.Tbs.
S.Paper
Cr.Gls.

B.Mar.
Cw.Blls.
S.Paper

T.Bls.
Tnd.Gngs.

Timp.
Crot.

Tub 2
Timp. 26"
L.Dr.

Tub 4
Timp. 29"
4.Tri.

Tub 5
Timp. 32"
P.Foil

Tub 1
Cr.Gl.H
A.Foil
Dbc.
P.Foil
O.Gng.

Tub 3
Cr.Gl.M
A.Foil
W.Gng

Tub 6
Cr.Gl.L
A.Foil
B.Tree
W.Gng

S.Cym.
Ch.Cym.

Tam.

Th.Sht.

B.Dr.
Th.Sht.

216

Crot.
M.Tbs.
Egg Sh.
Cr.Gls.

Glsp.
M.Tbs.
Fl.T.
Egg Sh.
Cr.Gls.

Vib.1
M.Tbs.
Mar.
Egg Cups

Vib.2
M.Tbs.
Mar.
Q.Glsp.

Mar.2
M.Tbs.
S.Paper
Cr.Gls.

B.Mar.
Cw.Blls.
S.Paper

T.Bls.
Tnd.Gngs.

Timp.
Crot.

Tub 2
Timp. 26"
L.Dr.

Tub 4
Timp. 29"
4.Tri.

Tub 5
Timp. 32"
P.Foil

Tub 1
Cr.Gl.H
A.Foil
Dbc.
P.Foil
O.Gng.

Tub 3
Cr.Gl.M
A.Foil
W.Gng

Tub 6
Cr.Gl.L
A.Foil
B.Tree
W.Gng

S.Cym.
Ch.Cym.

Tam.

Th.Sht.

B.Dr.
Th.Sht.

"REM sleep"

♩=72

227

Crystal Glass (tuned)

Crot. M.Tbs. Egg Sh. Cr.Gls.

Glsp. M.Tbs. Fl.T. Egg Sh. Cr.Gls.

Vib.1 M.Tbs. Mar. Egg Cups

Vib.2 M.Tbs. Mar. Q.Glsp.

Mar.2 M.Tbs. S.Paper Cr.Gls.

B.Mar. Cw.Blls. S.Paper

T.Bls. Tnd.Gngs.

Timp. Crot.

Tub 2 Timp. 26" L.Dr.

Tub 4 Timp. 29" 4.Tri.

Tub 5 Timp. 32" P.Foil

Tub 1 Cr.Gl.H A.Foil Dbc. P.Foil O.Gng.

Tub 3 Cr.Gl.M A.Foil W.Gng

Tub 6 Cr.Gl.L A.Foil B.Tree W.Gng

S.Cym. Ch.Cym.

Tam.

Th.Sht.

B.Dr. Th.Sht.

SONNOGRAPHY

235

Crot.
M.Tbs.
Egg Sh.
Cr.Gls.

Glsp.
M.Tbs.
Fl.T.
Egg Sh.
Cr.Gls.

Vib.1
M.Tbs.
Mar.
Egg Cups

Vib.2
M.Tbs.
Mar.
Q.Glsp.

Mar.2
M.Tbs.
S.Paper
Cr.Gls.

B.Mar.
Cw.Blls.
S.Paper

T.Bls.
Tnd.Gngs.

Timp.
Crot.

Tub 2
Timp. 26"
L.Dr.

Tub 4
Timp. 29"
4.Tri.

Tub 5
Timp. 32"
P.Foil

Tub 1
Cr.Gl.H
A.Foil
Dbc.
P.Foil
O.Gng.

Tub 3
Cr.Gl.M
A.Foil
W.Gng

Tub 6
Cr.Gl.L
A.Foil
B.Tree
W.Gng

S.Cym.
Ch.Cym.

Tam.

Th.Sht.

B.Dr.
Th.Sht.

5 small Bells
play freely, very irregular

p cresc. mf
Quartetone Glockenspiel, *play freely, very irregular*

f dim.
mf

Tuned Cowbells, *soft mallets* *play freely, very irregular*

p cresc.

Tuned Gongs

Suspended Cymbal on Timpano
use pedal

mp

Tub, very soft tir

ppp-p

Tub, very soft timpani r

ppp < p

Watergong, small, gliss. down

pp

Watergong,
pp

Ch:
p

pp cresc.
mp

pp cresc.
mp

pp

pp cresc. mp dim.

pp cresc.
mp dim.

pp cresc.

240

Crot.
M.Tbs.
Egg Sh.
Cr.Gls.

Glsp.
M.Tbs.
Fl.T.
Egg Sh.
Cr.Gls.

Vib.1
M.Tbs.
Mar.
Egg Cups

Vib.2
M.Tbs.
Mar.
Q.Glsp.

Mar.2
M.Tbs.
S.Paper
Cr.Gls.

B.Mar.
Cw.Blls.
S.Paper

T.Bls.
Tnd.Gngs.

Timp.
Crot.

Tub 2
Timp. 26"
L.Dr.

Tub 4
Timp. 29"
4.Tri.

Tub 5
Timp. 32"
P.Foil

Tub 1
Cr.Gl.H
A.Foil
Dbc.
P.Foil
O.Gng.

Tub 3
Cr.Gl.M
A.Foil
W.Gng

Tub 6
Cr.Gl.L
A.Foil
B.Tree
W.Gng

S.Cym.
Ch.Cym.

Tam.

Th.Sht.

B.Dr.
Th.Sht.

SOMNOGRAPHY

243

Crot.
M.Tbs.
Egg Sh.
Cr.Gls.

Glsp.
M.Tbs.
Fl.T.
Egg Sh.
Cr.Gls.

Vib.1
M.Tbs.
Mar.
Egg Cups

Vib.2
M.Tbs.
Mar.
Q.Glsp.

Mar.2
M.Tbs.
S.Paper
Cr.Gls.

B.Mar.
Cw.Blls.
S.Paper

T.Bls.
Tnd.Gngs.

Timp.
Crot.

Tub 2
Timp. 26"
L.Dr.

Tub 4
Timp. 29"
4.Tri.

Tub 5
Timp. 32"
P.Foil

Tub 1
Cr.Gl.H
A.Foil
Dbc.
P.Foil
O.Gng.

Tub 3
Cr.Gl.M
A.Foil
W.Gng

Tub 6
Cr.Gl.L
A.Foil
B.Tree
W.Gng

S.Cym.
Ch.Cym.

Tam.

Th.Sht.

B.Dr.
Th.Sht.

254

Crot.
M.Tbs.
Egg Sh.
Cr.Gls.

Glsp.
M.Tbs.
Fl.T.
Egg Sh.
Cr.Gls.

Vib.1
M.Tbs.
Mar.
Egg Cups

Vib.2
M.Tbs.
Mar.
Q.Glsp.

Mar.2
M.Tbs.
S.Paper
Cr.Gls.

B.Mar.
Cw.Blls.
S.Paper

T.Bls.
Tnd.Gngs.

Timp.
Crot.

Tub 2
Timp. 26"
L.Dr.

Tub 4
Timp. 29"
4.Tri.

Tub 5
Timp. 32"
P.Foil

Tub 1
Cr.Gl.H
A.Foil
Dbc.
P.Foil
O.Gng.

Tub 3
Cr.Gl.M
A.Foil
W.Gng

Tub 6
Cr.Gl.L
A.Foil
B.Tree
W.Gng

S.Cym.
Ch.Cym.

Tam.
Tamtam, wit!
ppp

Th.Sht.

B.Dr.
Th.Sht.

SONNOGRAPHY

Fine

260

SOMNOGRAPHY