EAR–WALKING WOMAN

for prepared piano

Annea Lockwood

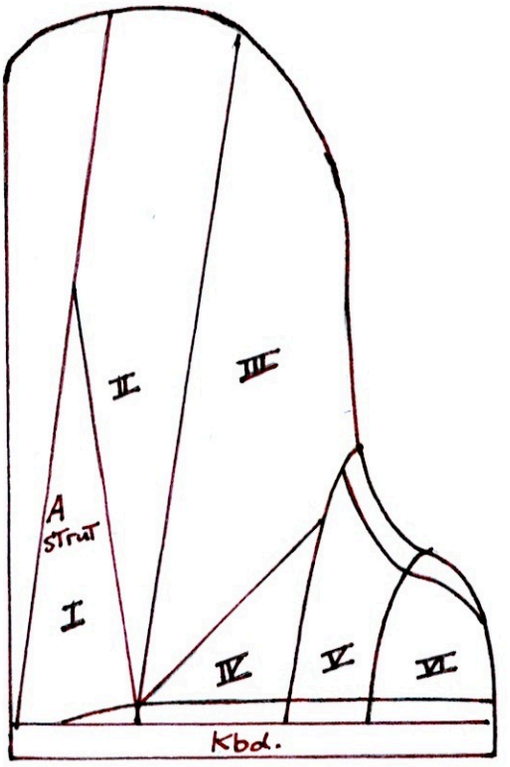
for Lois Svard

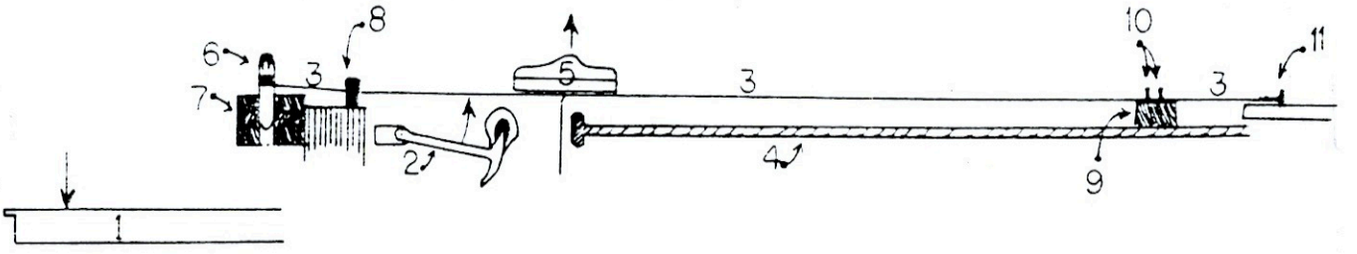
Ear-Walking Woman (1996)

for prepared piano and exploring pianist, uses the classic piano preparations: dimes (to detune strings), screws, wiring insulation sheathing (to create a wood-block like sound when inserted between strings), bubble wrap, a rubber ball and wooden mothballs, two round small stones, a bowl gong, mallets and a glass water tumbler.

The interior of the piano is a rich source of sounds, as many 20th century musicians have found. When I started experimenting on my own piano with these objects, I found that even slight changes in the way of producing the sound evoked striking variants in the details of that sound, for example; rocking one of the stones between two sets of strings brings out several pitches and their overtones. A gentle push evokes just a few. Getting the stone to really rock hard brings out those plus higher pitches which gradually fade away as the stone comes to rest, and at times the stone will turn over, setting off a new set of strings and new pitches.

Rather than creating a finished piece, I have set up the work as an open-ended exploration, in which I have determined the sound sources to be used in each 'phrase', and in performance,the pianist is working with the variations of hand-angle, timing, pressure etc. and the changes which these produce in the sound. I think of this experience as ear-walking, like a hiker exploring a new landscape and with this piece I am returning to the approach I took with glass, in the **Glass Concerts** (1966-72).



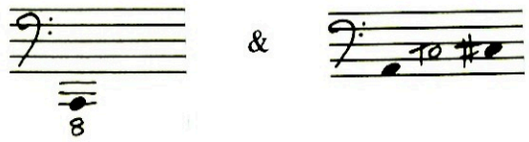


1 KEY
2 HAMMER
3 STRING
4 SOUNDBOARD
5 DAMPER
6 TUNING PIN
7 PIN BLOCK
8 AGRAFFE
9 BRIDGE
10 BRIDGE PINS
11 HITCH PIN

EAR – WALKING WOMAN

PREPARATIONS

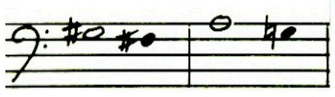
1. Place a sheet of bubble wrap (bubbles up) on the bass strings (area I) about a comfortable arm's reach back from the dampers, to cover all strings except

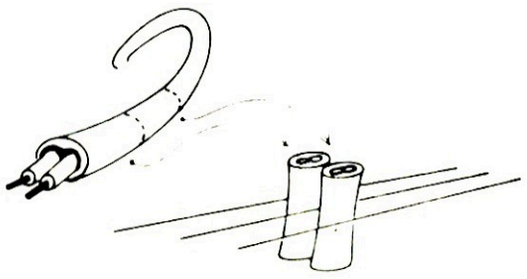


2. Insert a dim under the middle string of these keys (white note heads), head up. This should produce the sounding pitch notated in the black note heads. If necessary, adjust the choice of the keys you prepare until this particular whole-tone scale of sounding pitches is created. This may necessitate re-notating phrase 8 and other places in which these written notes are used. Adjust slightly to get the richest, most bell-like tone. Make sure the dime doesn't touch the strings of adjacent notes. If the dime creates a buzzing sound, rotate it until you eliminate the buzz.

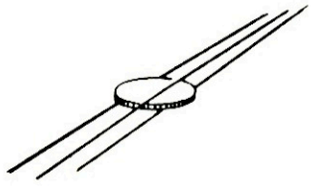
3. Place a screw between strings 2 & 3 of D; and between strings 1 & 2 of E. Place the screw just two or three turns in, i.e. far enough to hold it in place without rattling when struck or when the key is played. The resulting under and overtones are given in small note heads.

4. Remove the inner wire and cut four 2 inch lengths of the plastic insulation sheathing used in 12/2 type NM Romex electrical cable, or its equivalent. Insert as in the following diagram for these two notes, position the tubing to produce the pitch alterations given; they should not touch one another, nor touch the piano soundboard, and should produce a clear, resonant timbre.





Insertion of dime between strings



Tips for making and using the superball mallets:

Use the superballs children use, threading them onto slender but long barbecue sticks - these resonate slightly - rather than the heavier balls percussionists usually use.
They come in two sizes and I suggest using the larger size for working on the struts, and the smaller size for the strings.

To make them: I gently put a hole in the ball with one of those tools you use for making holes in which to insert screws (you know them? can't think of the term - spiral shank). They don't split the balls the way just poking the stick into the ball tends to do.

Hold the stick 3 inches or so down from the ball, and I find that I have the best control with my forefinger extended.

Some points to assist:
The struts need to be 'warmed up' before they'll really sing. So it takes several initgial strokes, which tend to sound less resonant, then a cumulative vibration sets in and away they go.

Pull the mallets towards you, fairly slowly, guage the speed by the sound you're getting; you should get both the pitch of the strings and a lower undertone. The dime-prepared strings give more than one pitch, which makes them more interesting still.
It's a wailing, moaning sort of sound and should be very beautiful. It's never a fast gesture on either strings or struts.

Experiment with how much pressure you use - it's a matter of pressure and speed and takes some experimenting. Sometimes, when a string is really resonating, I even slow the pull down. It's sensing the material, and what it wants to do.

YOU WILL ALSO NEED

A fairly heavy rubber ball, about 7 inches in circumference.

One or more superball mallets; most easily made by pushing a thin barbecue stick into a small superball. Some superballs sound much better than others, so try out several different types. I have also found that the small superballs sound good on the strings, but the medium size ones sound better on the struts.

Two cedar-wood mothballs or other small wooden balls.

A convex-bottom bowl gong, about 6 inches in diameter, and mallet. Often available from Buddhist supply stores, or in the US, from Shasta Abbey Buddhist Supplies: telephone (916) 926-6682, or write to P.O.Box 199, Mt. Shasta, CA 96067.

A ceramic pestle (used for grinding spices).

Two round stones which will rock easily on the strings – different sizes.

A hard percussion mallet.

A glass water tumbler with a slightly uneven rim.

PERFORMANCE INSTRUCTIONS

The performance is an exploration of the rich array of variables possible within these sounds. Durations are open to the performer. Dynamics are generally soft unless otherwise specified. You will need amplification: I've used two different arrangements, either 3 mics (for bass, mid-range and treble areas), or two really sensitive mics placed in the curve of the piano.
Numbers I II III IV V and VI refer to the areas indicated on the piano diagram, recognising that struts are placed differently in various pianos.

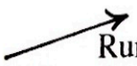
Phrase 1


Using the superball mallet, slide it up the strings towards you, creating changing pitches. Experiment with pressure and position to find the richest mix of pitches. If on a dime-prepared note, try sliding the mallet up the middle raised string for best results.


Roll rubber ball across bass strings close to the bubble wrap, so that the wrap vibrates.

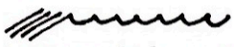
3


Slowly move the superball mallet along the strut towards you, producing a changing pitch like whale song. Experiment with pressure. The resonance builds so the more you do it, the richer are the resulting sounds. Using two mallets in close or overlapping alternation works well also.


Run the end of the superball mallet stick from L to R across the strings between the bridge pins and the hitch pins (see diagram). The sound should be high and brilliant. Try a thinner, flexible stick if the s.b.mallet sounds dull.

4


Take a cedar mothball in each hand and roll them lightly across the strings behind the tuning pins (between numbers 6 and 8 in the diagram), guiding them loosely between the thumb and next two fingers. This should be a continuous sound, so when one hand is reversing direction (creating a slight break in the sound), the other hand should 'cover' it.


Hold the larger stone very close to the strings. Drop it so that it bounces (a *battute* effect) then set it rocking around on the strings. Get it moving across several strings to get pitch variety. Note: you are not dragging the stone across the strings; its own rocking motion makes it traverse them. Let it come to a stop naturally.


Set the bowl gong rocking on these strings.

 Same gesture as that which cadences phrase 3

5

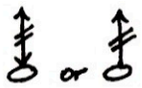
 Up-strings gliss. (with s.b.mallet) with a diagonal sweep to the R towards the end. Use pressure to bring out upper partials. Note: these strings should not be covered by the bubble wrap.

7

L H pizz. Pizz so that the bubble wrap rattles. Different strings will vibrate at different rates, creating a sort of cross-rhythm. Seek these out.

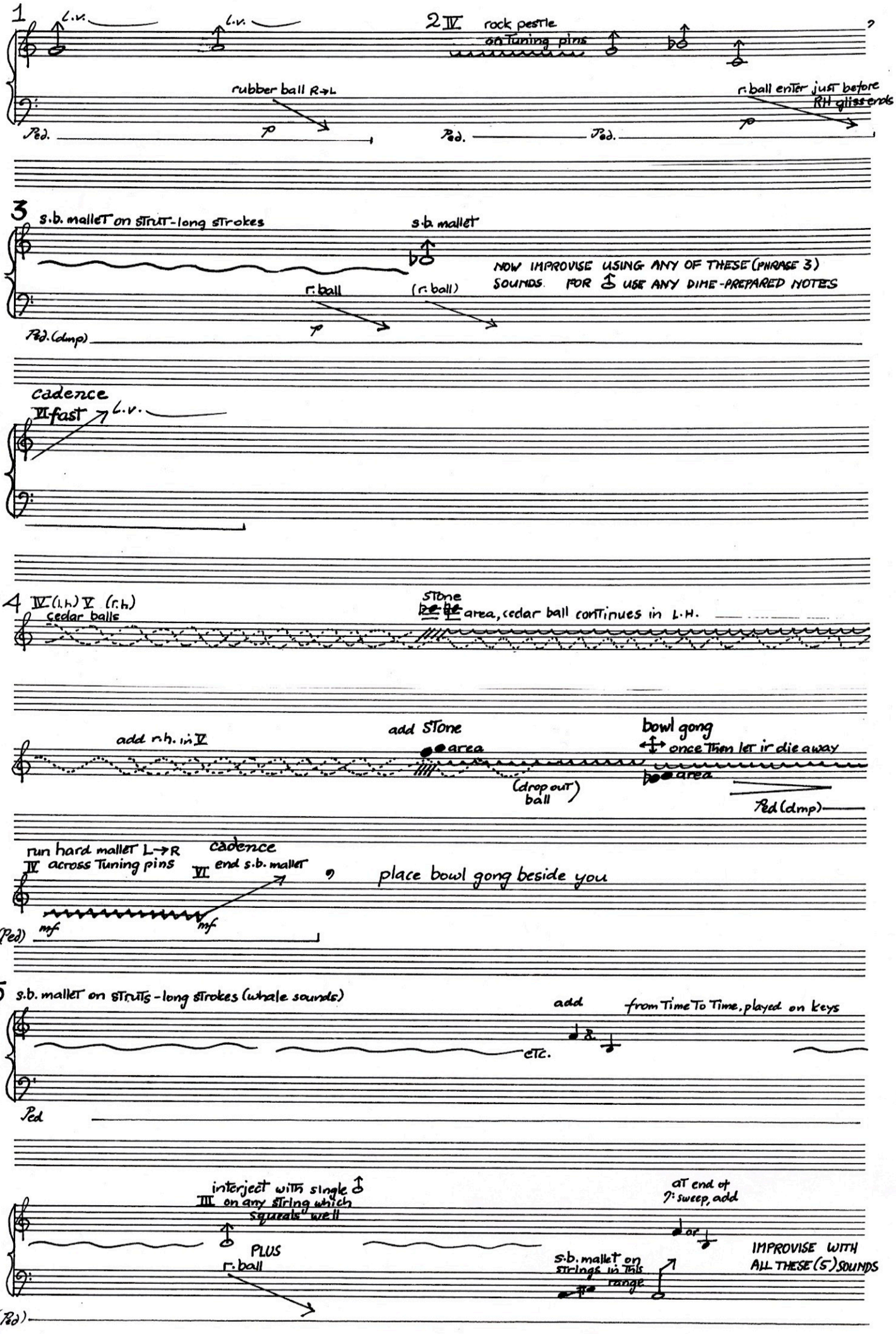
× Lightly tap the screw-head with the s.b.mallet. The screw should not rattle in the strings.

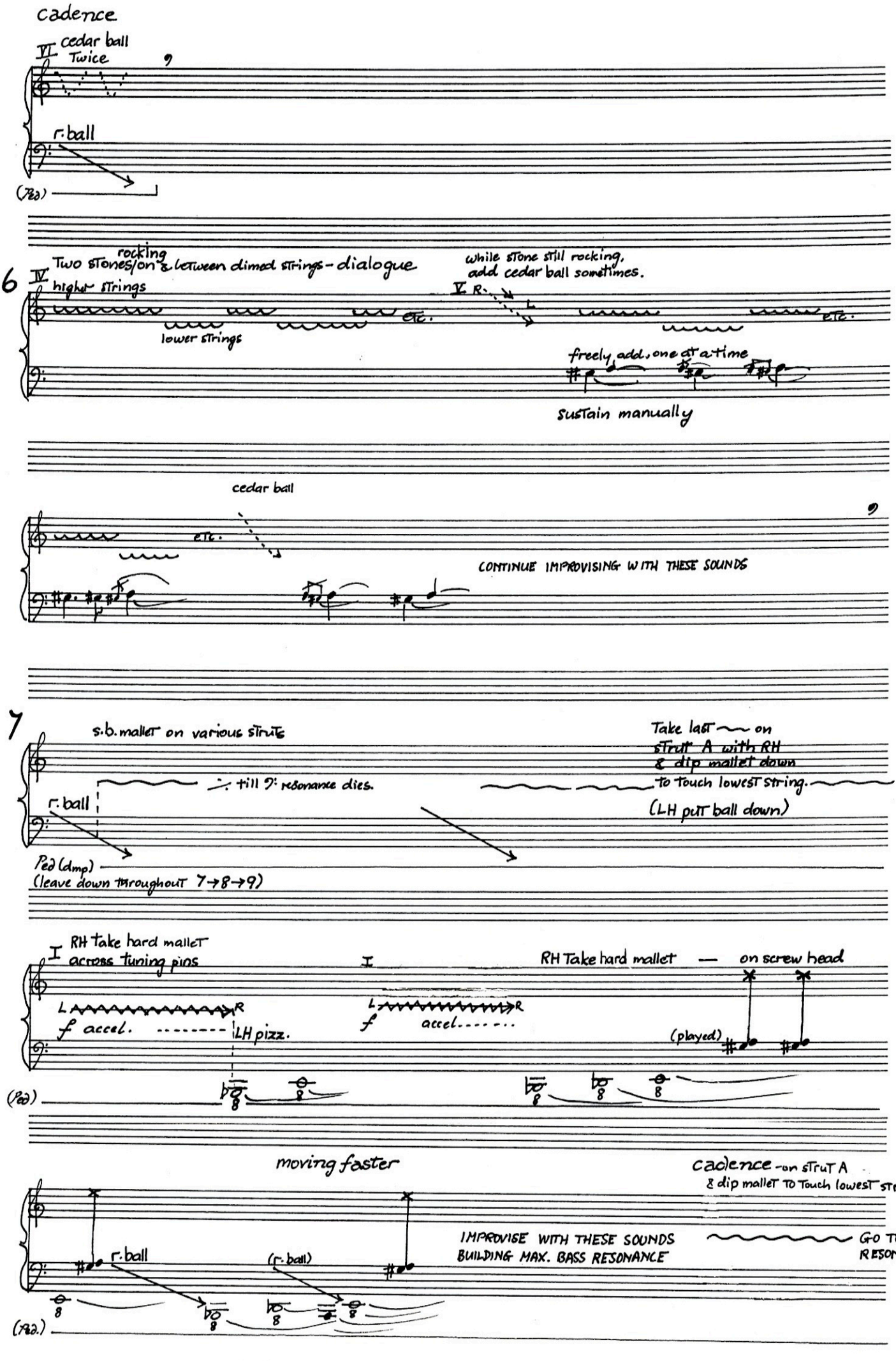
9

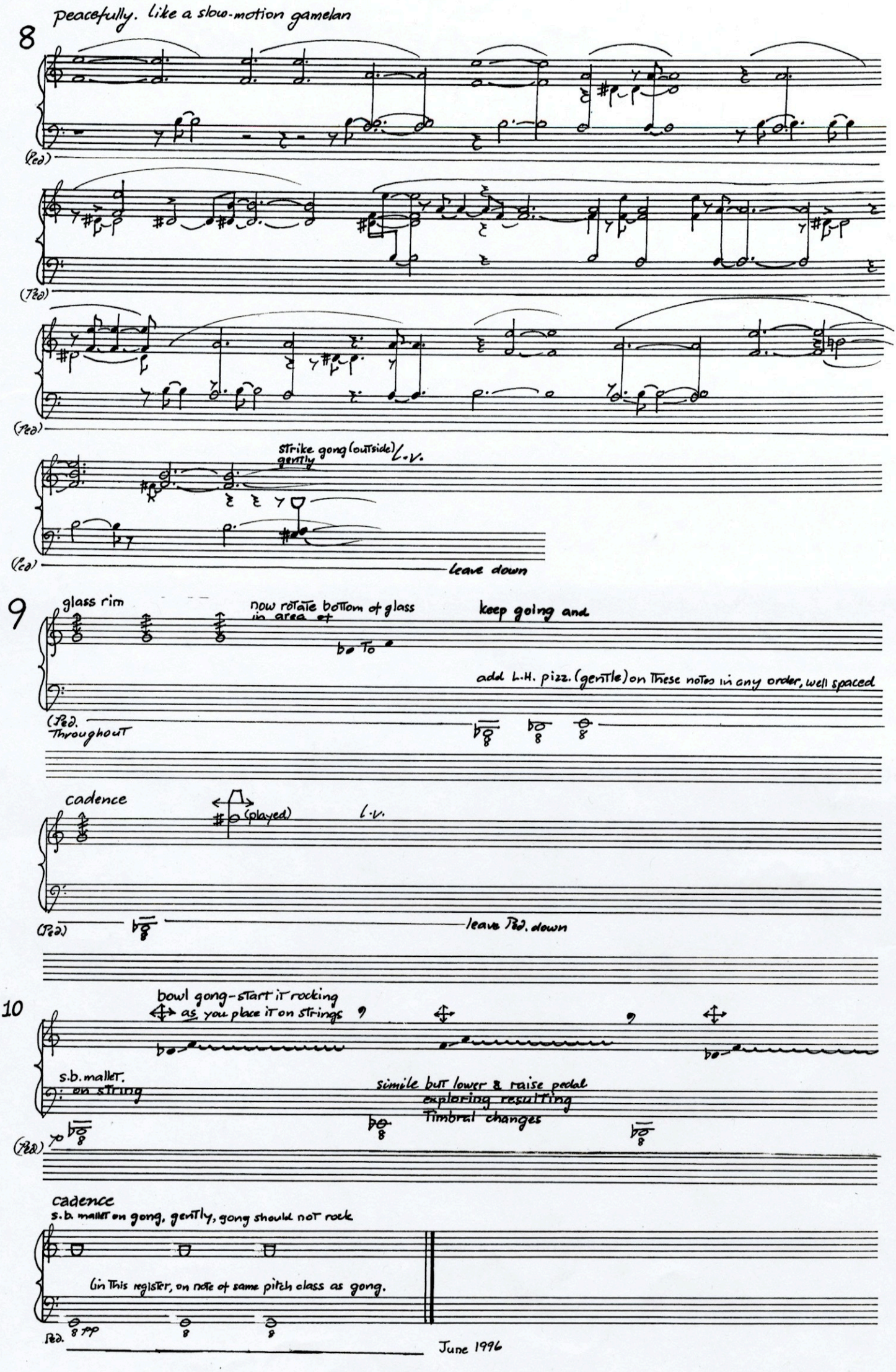
 Continuously slide the rim of the water tumbler towrds and away from you on the strings. Aim for maximum resonance. Center the action on the raised middle string of the dime-prepared notes.

L.H.pizz in front of the hammers to minimise bubble wrap noise.

 Place the base of the tumbler on the strings around/on this F#. Rotate it gently.


1
l.v.
l.v.
2 IV
rock pestle
on Tuning pins
rubber ball R→L
r. ball enter just before
RH gliss ends
Ped.
Ped.
Ped.
3
s.b. mallet on strut - long strokes
s.b. mallet
NOW IMPROVISE USING ANY OF THESE (PHRASE 3)
SOUNDS. FOR ♙ USE ANY DIME-PREPARED NOTES
r. ball
(r. ball)
Ped. (dmp)
cadence
VI fast
l.v.
4
IV (l.h.) V (r.h.)
cedar balls
stone
area, cedar ball continues in L.H.
add r.h. in V
add stone
area
bowl gong
once Then let ir die away
(drop out
ball)
area
Ped (dmp)
run hard mallet L→R
IV across Tuning pins
cadence
VI end s.b. mallet
place bowl gong beside you
(Ped)
mf
mf
5
s.b. mallet on struts - long strokes (whale sounds)
add
from Time To Time, played on keys
etc.
Ped
interject with single ♙
III on any string which
squeals well
PLUS
r. ball
at end of
♪: sweep, add
or
s.b. mallet on
strings in this
range
IMPROVISE WITH
ALL THESE (5) SOUNDS
(Ped)


cadence
VI cedar ball
Twice
9
r. ball
(Ped)
6
IV rocking
Two stones/on & between dimed strings - dialogue
higher strings
lower strings
etc.
while stone still rocking,
add cedar ball sometimes.
V R
L
etc.
freely add, one at a time
sustain manually
cedar ball
etc.
9
CONTINUE IMPROVISING WITH THESE SOUNDS
7
s.b. mallet on various struts
till 9: resonance dies.
r. ball
Take last ~ on
strut A with RH
& dip mallet down
to touch lowest string.
(LH put ball down)
Ped (dmp)
(leave down throughout 7→8→9)
I RH Take hard mallet
across tuning pins
L
R
f accel.
LH pizz.
I
L
R
f accel.
RH Take hard mallet — on screw head
(played)
(Ped)
moving faster
cadence - on strut A
& dip mallet to touch lowest string
r. ball
(r. ball)
IMPROVISE WITH THESE SOUNDS
BUILDING MAX. BASS RESONANCE
GO TO 8 BEFORE
RESONANCE DIES
(Ped.)


peacefully. like a slow-motion gamelan
8
(Ped)
(Ped)
(Ped)
strike gong (outside) gently
l.v.
(Ped)
leave down
9
glass rim
now rotate bottom of glass in area of
keep going and
add L.H. pizz. (gentle) on these notes in any order, well spaced
(Ped. throughout
cadence
(played)
l.v.
(Ped)
leave Ped. down
10
bowl gong - start it rocking as you place it on strings
s.b. mallet. on string
similar but lower & raise pedal exploring resulting timbral changes
(Ped)
cadence
s.b. mallet on gong, gently, gong should not rock
(in this register, on note of same pitch class as gong.
Ped.
June 1996
JG