

Uncanny Valley

for violin/viola, cello, contrabass, 2 perc, piano/melodica, computer, and soprano

Natacha Diels 2011

About the piece

“Uncanny Valley” defines the region where robotic human replicas begin to emulate human characteristics too closely, causing revulsion in observers. This monodrama emulates this sometimes-uncomfortable line between mechanical and human through the use of acoustic and electronic instruments and simple visual, and text written by Dominique Ahkong. Inspired by the legend of Descartes’ “daughter,” Francine, the story pursue the discovery, personality, and eventual heartless destruction of this mechanical being.

The piece incorporates interludes written by Jessie Marino (prelude, or Interlude 1), Andrew Greenwald (Interlude 2), David Broome (Interlude 3), and Bryan Jacobs (postlude, or Interlude 4), each of which marks a portion of the possible life-cycle of an automaton. The final animation was made by Kakyoung Lee.

“Uncanny Valley” was conceived for the fulfillment of an Emerging Artist Commission from Issue Project Room.

Technical considerations:

All instruments should be amplified. The computer part is a Max/MSP patch working with Logic Pro. The conductor wears a click track and a glove equipped with a switch to turn the click on and off at fermatas or interludes.



TEXT

by Dominique Ahkong

Night quickens with murk
over the thickening sea.
Voyage through salt dark.
Winter swallows every glow
and disgorges silvery froth.
Now it churns the sea.

The wind flicks spittle on the swell,
then the sky splits open.
From its bellowing belly falls
and surges a luminous phantom.

The sailors descend into the dark.
In the cabin they find the trunk
in which the girl sleeps.
They wind the crank and lift the hinge:
limb folded into limb!

So arises the girl from slumber,
limb upon limb unfolding.
The head unrolls and lifts.
The shoulders untwist and open.
The knees pull back beneath the frock---
so she rises and stands.

The sailors stand pale, transfixed
by the girl; she shifts from toe to toe.

Doors rattle in their casings.
A violet chill mounts
with the sea-wind's howl.
A chair falls to the floor.

Lurching ship
stumbling men
stiffening girl
nodding on the floor.
The head unrolls and lifts.

The shoulders untwist
and shudder
The knees
fevered knees jerk
girl nod nodding on the floor.

Phantasmal girl! Daughter of the storm!
resounds the skipper's roar---
Overboard, overboard!
So the convulsing girl is dragged
heaved overboard, overboard,
into the shuddering sea.

Uncanny Valley

Vocal Key

Throughout the piece, the singer is accompanied by the narrated vocal part. This piece is written for a range from D#3 to C6. The upper pitches are intended to be achieved ingressively.



“Hmm”
fall in pitch. Pitch does not need to be accurate.



a noisy unpitched sound such as a voice crackle.
Does not need to be consistent throughout.

controlled falling screech



Ingressive screech with many noisy tones within



Very wobbly, fast, shaky vibrato



closed mouth



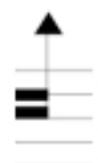
unpitched short sound



gliss



ingressive



as high as possible

Uncanny Valley

Strings Key

All strings should play sul pont throughout. Bass harmonics are notated one octave above sounding pitch.



a very fast, thin, frantic vibrato



a very wide, exaggerated, possibly uneven vibrato



pizz



pizz behind bridge (all) or with left hand behind fingered note (specified for vla/vln only)

BB

vla/vln only- applied to above, denotes pizz behind bridge

LH

vla/vln only- applied to above, denotes pizz with left hand behind fingered note



diagonal motion of bow across string (windshield wiper motion)
should make a noisy/screechy sound



jete, mute all strings if designated



sag pitch slightly at the very end of the note



gliss

scratch bow- short note values should be as crunchy as possible



as high as possible

Uncanny Valley

Piano Key

P

Play piano

M

Play melodica

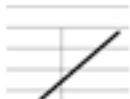


prepare these notes with jangly or rattly things like bolts

The pianist plays with click track (with perc 2) in the last section of the piece. The click track is out of time with the rest of the ensemble. The conductor will cue the pianist to return to the ensemble's time.

In several areas the pianist plays melodica and piano simultaneously.

Harmonics are notated with keys depressed in the left hand and resulting sounding pitches as diamond noteheads in the right hand.



use your fingernail to scratch strings inside piano



wiggle between designated notes



arpeggiate designated notes



flutter tongue (melodica)

Uncanny Valley

Percussion Key

Instrument List

Vibraphone
Glockenspiel
2 Snare Drums
2 high Triangles
2 Woodblocks, 1 high and 1 low
2 large cymbals
1 very small cymbal or bell
1 ratchet
Bass drum
Chain
Superball mallets
High hat

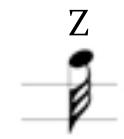
On 3-line staff



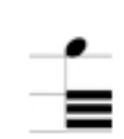
Triangle



High Hat (closed)



High Hat (sizzle)



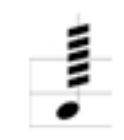
strike bell of small cymbal placed on snare



Cymbal (rub superball mallets unless otherwise specified)



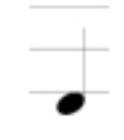
swipe inside rim of snare drum with stick
(squeaky sound)



snare drum rim



bow dowel



chain



bass drum

On 2-line staff



Strike bell of cymbal or snare rim



high woodblock



ratchet



low woodblock



a lower sharp sound

Perc 2 follows a click track in the last portion of the piece.

This section is out of time with the rest of the ensemble
(except piano).

0'00

■ VOICE CUE
[CRANK] O..... EYES STAY OPEN, BLINK WHEN NEEDED ON BEAT.

VN
[VC]
BASS → WITH CLICKER

■ PERC [TACIT]

PIANO

1'01

■ VOICE "THERE IS SOMETHING I NEED TO TELL YOU!"

VN
VC
BASS

■ PERC

PIANO, Eb:
C4:

1'00

2'00

2'01

■ VOICE

VN
VC
BASS

■ PERC

PIANO, Eb:
Db:
C4:

2'40

[AIR] AAAAH "I HAVEN'T BEEN COMPLETELY HONEST"

INTERLUDE ONE:
UNCANNY VALLEY
FOR NDCD

JM.092011

2

A $\text{♩} = 55$

Computer Voice

NIGHT QUICKENS WITH MURK OVER THE THICKENING SEA VOYAGE THROUGH SALT DARK

Maria

a bit introverted

PP NN_KKKEE

TRRR TH_R KK

mumbly cackle

THK SEETHH_KK MMTR_KK_HE_TKK HM

crackle

HM MM

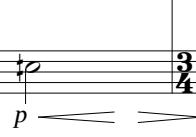
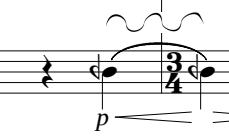
TT-T-K-K-TRR-SST

behind bridge

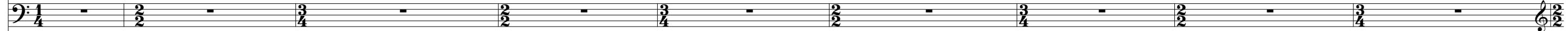
(x)(x)

arco always
sul pontarco always
sul pont

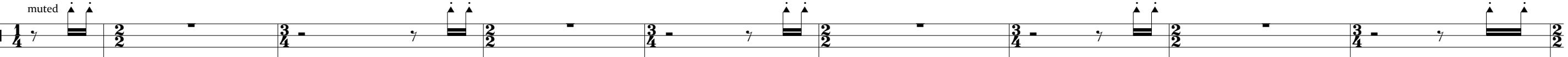
p



Db.



Perc.

mp
hi triangle
not muted

p

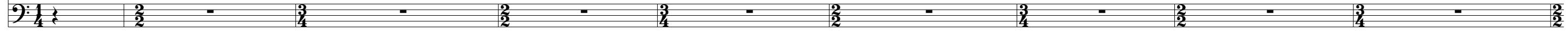
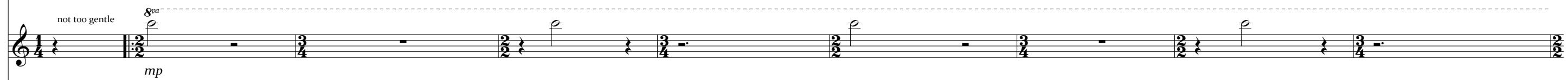
Perc.



glock

mp

Pno.



Maria
 WINTER SWALLOWS EVERY GLOW AND DISGORGESSILVERY FROTH
 (strained whisper) gibberish whisper with high pitches hm without pitch pure noise
 MM K K WEEE_D_CRR_K_SWAAAAA_VV_V_G_AAH mf pp THBBBT
 Vla. (x)(x) sul pont
 Vc. (x)(x) mp
 Db. pizz IV arco <mp>
 Perc. superball on cymbal
 Perc.
 Pno.
 Pno.

The musical score consists of six staves. The top staff is for 'Maria' with lyrics: 'WINTER SWALLOWS EVERY GLOW AND DISGORGESSILVERY FROTH'. Below are staves for 'Vla.', 'Vc.', 'Db.', 'Perc.', 'Perc.', and 'Pno.'. The vocal part for Maria includes performance instructions: '(strained whisper)', 'gibberish whisper with high pitches', 'hm', 'without pitch', 'pure noise', 'MM K K', 'WEEE_D_CRR_K_SWAAAAA_VV_V_G_AAH', 'mf', 'pp', 'THBBBT', '(x)(x)', 'sul pont', '(x)(x)', 'mp', 'pizz IV', 'arco', '<mp>', and 'superball on cymbal'. The other staves show rhythmic patterns and dynamics like 'p', 'p >>', and 'p'.

VIOLIN

CELLO

PERC.

(GUIRO ON VIB. RESONATORS.)

ASCENDING → 2 RATTAN MALLETS
FAST, VIOLENT.

DESCENDING ← 2 RATTAN MALLETS.

PEDAL DOWN ALL.

MEDIUM HARD MALETS. (PITCH) (PITCH) (PITCH)
(BEND.) (BEND.) (BEND.)

ARCO.

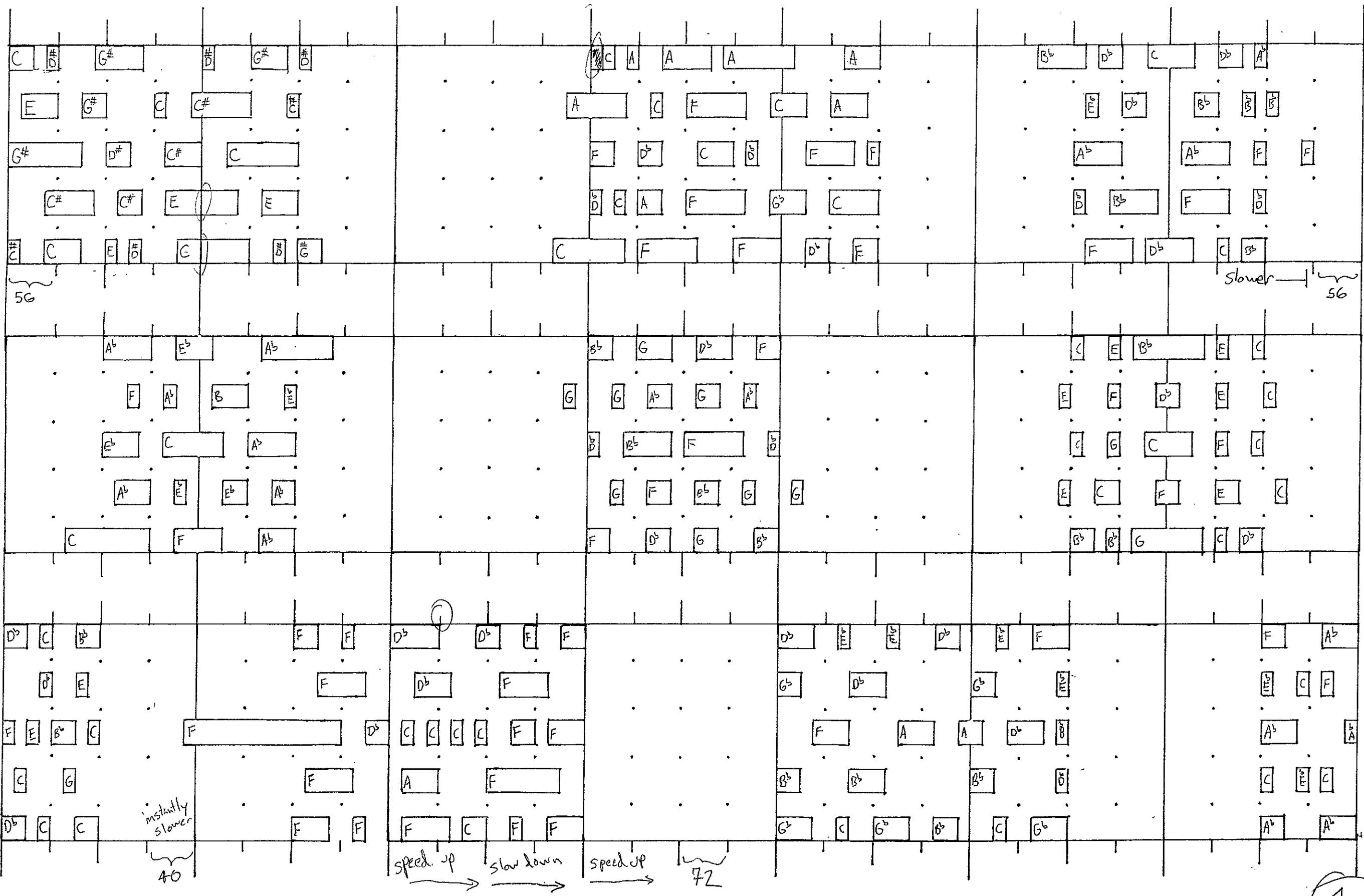
L.H. - PLACE PLASTIC MALLETS ON BOWED BAR. LET MALLETS BOUNCE AS BAR IS BOWED.

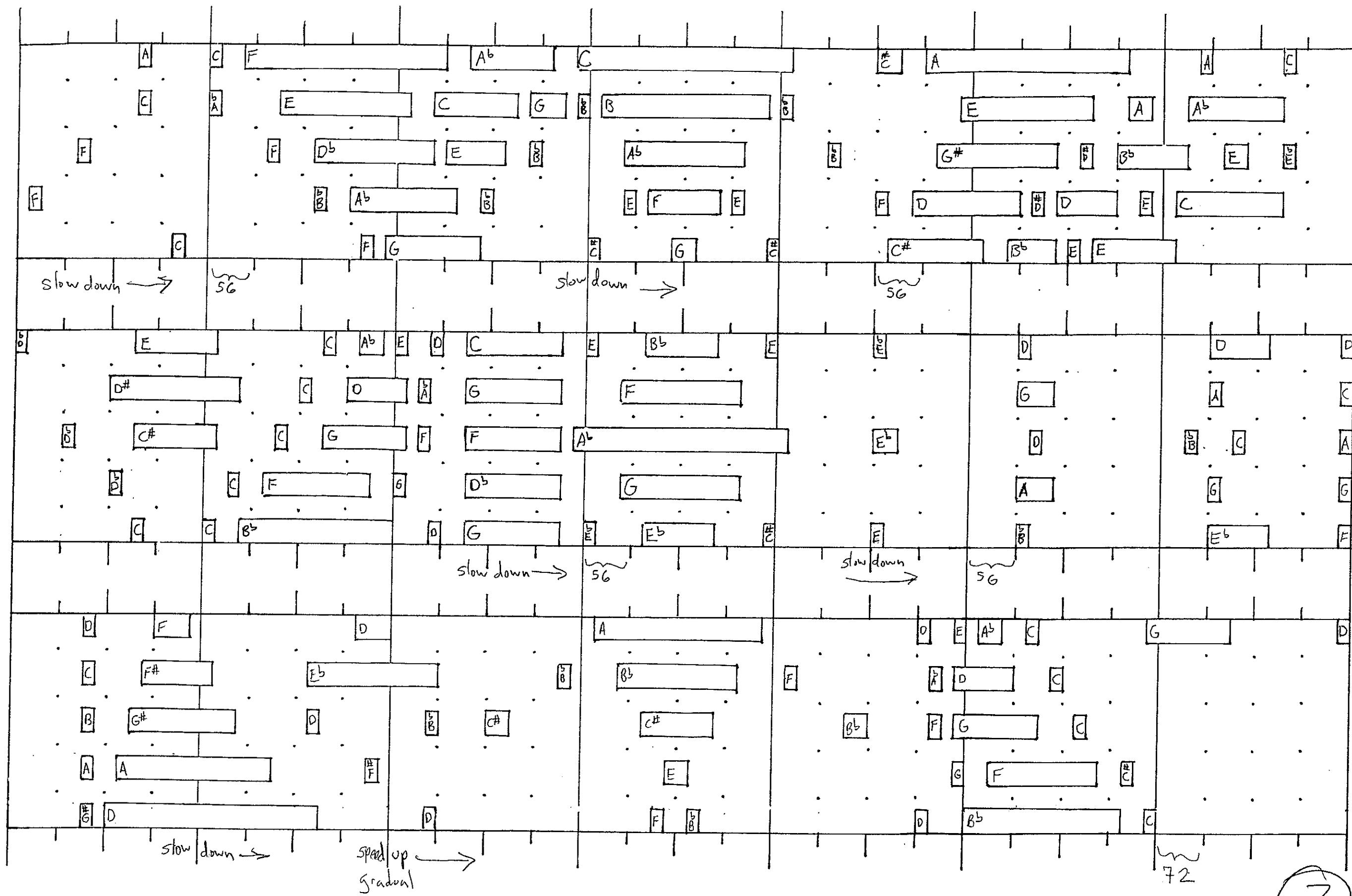
1. 2.

16

17

2.





72

uncanny valley ending

$\text{♩} = 60$

until m38 inhale a couple beats before each tape attack and exhale after. Slowly add fast rhythmic unvoiced agitation's for about one beat on each attack.

snare
fingers
ppp

high squeaks on each tape attack (until m51)

mp 10 10

n < mp > pp > n **n < pp**

n < mp > pp > n **n < pp**

n < mp > pp > n **n < mp > n** **n < mp > n** **n < mp > n**

n < mp > n **n < mp > n**

Tape

23

Voice

23

Perc. 1

Perc. 2

23

Pno.

23

Vln.

Vlc.

Cb.

23

Tape

mp (match tape volume)

melodica

mp (match tape volume)

n < mp > p

n < mp > n **n < mp > pp < mp > pp** **n < mp > pp**

n < mp > n **mfp > p**

n < mp > n

Tape

