

Industry and the Arts

for alto voice with MUGIC controller and electronics

Taylor Brook

2022

Industry and the Arts

Text

I - Trees

Do you talk to trees?

Do you ever go inside trees?

This makes things difficult to understand, and harder to represent. This is natural.

Look at the trees with me...

- AI generated based on Emily Carr

II - Posatures

[syllables only, no words]

III - Marre Solenoid

AI has a long history.

Its first use was to replicate the work of mathematicians and astronomers.

The first known AI program was created in 1949 by the Belgian mathematician and automata pioneer Léon Theremin.

A long history.

“Marre solenoid” (literally: “Only Ear”) was a mechanical elephant that moved on magnetic wheels through a set of pre-recorded music.

Artists will also benefit from machine learning as it becomes more easily accessible.

Replicate the work of mathematicians and astronomers.

A number of new music and art communities have emerged in recent years, (a long history) and many artists, curators, and social media personalities have experimented with new means of connecting with their audience, (Marre solenoid, a mechanical elephant) without having to rely on traditional institutions. Artists become more easily accessible.

Mathematicians and astronomers replicate.

A long history.

The use of AI to create derivative works, remixes, and mashups will significantly increase the output of creative output.

- AI generated based on essay by Taylor Brook

IV - panoramas

[syllables only, no words]

V - Industry is the Rival of the Arts

De ces palais les colonnes magiques

À l’amateur montrent de toutes parts,

Dans les objets qu’étalent leurs portiques,

Que l’industrie est rivale des arts.

-Nouveaux Tableaux de Paris (paris, 1828), vol. 1, p. 27

about *Industry and the Arts*

Industry and the Arts is a set of five short songs for alto voice with MUGIC controller and electronics. This piece was written for Heather Byford in 2022.

Industry and the Arts explores the relationship between industry and art. The initial inspiration for this piece was a passage that describes a newly-opened Parisian Arcade found in the opening page of Walter Benjamin's unfinished *Arcades Project*:

De ces palais les colonnes magiques
À l'amateur montrent de toutes parts,
Dans les objets qu'étalent leurs portiques,
Que l'industrie est rivale des arts.

-Nouveaux Tableaux de Paris (Paris, 1828), vol. 1, p. 27

Benjamin describes the 19th-century arcades of Paris as the birthplace of modern consumerism, and in this piece I connect this idea with today's technology of the Internet and machine learning as the focal point of industry's incursion into our lives and into art.

While writing this piece, I met with vocalist Heather Byford to create a corpus of recordings that were used to create the electronic elements of this piece. This electronic part takes the form of a motion controller (MUGIC) that is attached to the performer's hand, triggering electronics sound. The electronics relies heavily upon the machine-learning algorithms implemented into MAX by the FluCoMa library.

Vocal Techniques

graphic notation:

The second and third system of the second movement use graphic notation for pitch. For this section, the top and bottom lines of the staff are a semitone above and below the centre of A4. The staff is therefore a continuous range of a major second. Other than pitch, all other notation in this section is conventional.

Pronunciation:

This work is written in English, French, and IPA pronunciation. For IPA pronunciation, the following guide may be used: <https://www.ipachart.com/>

An arrow under the staff indicates a gradual change from one syllable to another.

MUSIC Notation

The score contains a staff for the Mugic controller with text descriptions and stick figure illustrations indicating movements. The second movement calls for postures taken from the European Oil Painting tradition. It may be useful to find examples of these postures from famous paintings to inform how they are performed.

An arrow in the Mugic staff indicates a gradual movement from one posture to the next.

microtonal notation

The following accidental nomenclature is used:

♭ - ♯ approximately 1/4 tone flat or sharp (50 cents)

↓ - ↑ approximately 1/6 tone flat or sharp (33 cents)

♭ - ♭ - ♭ - ♭ - ♭ - ♭ - ♭ - ♭ approximately 1/12 tone flat or sharp (17 cents)

The quarter-tone and sixth-tone alterations are significant changes in pitch, while the 12th-tone alterations provide something closer to a shift in intonation. The more the performer understands the harmonic role of their part and they are able to use their ear to tune, the more accurate the tuning becomes. The microtones are used almost exclusively to achieve acoustically consonant harmonies in just intonation. This piece is almost always rooted in D. Mockups of the piece that can be used to practice the intonation can be found here:

www.taylorbrook.info/industry/

Tech Rider

Summary:

Industry and the arts is a piece for amplified voice and electronics, using a mugic controller attached the vocalist's hand, live processing in MAX, and diffused through any number of loudspeakers.

Perofrmance package available at: www.taylorbrook.info/industry/

Required equipment:

MUGIC motion controller

Computer (M1 mac or similar)

audio interface (RME babyface or similar)

vocal mic (DPA headset preffered, otherwise Shure SM7B or similar)

mixer

Stereo Speakers

Software requirements:

MAX 8.x

flucoma version 1.x (free max package)

General guidelines for loudspeakers:

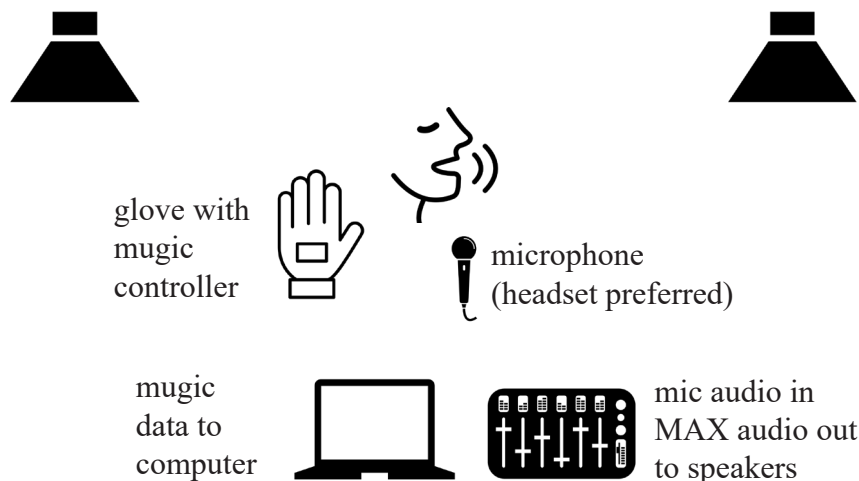
The precise positioning of the speakers is left open. I suggest that the speakers be placed behind the performer to encourage blend and strongly discourage placing the speakers at the front of the stage. If the piece is performed using surround sound, special attention should be given toward blending the live amplified sound throughout the speaker array.

MUGIC:

The MUGIC MAX patch(#2_MugicConnect) is included with the performance package files. The MUGIC MAX patch has been edited slightly from the software available on the MUGIC website. Please use the packed-in patch and not the one available from the MUGIC website.

The controller itself should be attached to the palm or back of hand by either taping the MUGIC or inserting it into a glove. When the hand is laid flat in front of the body, palm facing down, the MUGIC is considered to be in its initialized state. To initiallize the MUGIC, press "RESET_ORIENTATION" in the "#2_MugicConnect" MAX patch while holding the hand in front of you flat, palm facing down.

Stage Diagram (using stereo array):



Industry and the Arts

voice and motion controller (MUGIC)

Taylor Brook

I - Trees

♩ = 52

pp < *p* > *pp* < *p* > *mp*

Voice

m

Do you talk to trees?

Make slow, large circles with your arm.

Mugic

continue until end of song

nature sounds and filtered voice

Electronics

9

V

Do you e-ver go in-side trees? Look at the

17

V

trees with me

pp *poco*

s

mgc.

Industry and the Arts

2

II - Postures

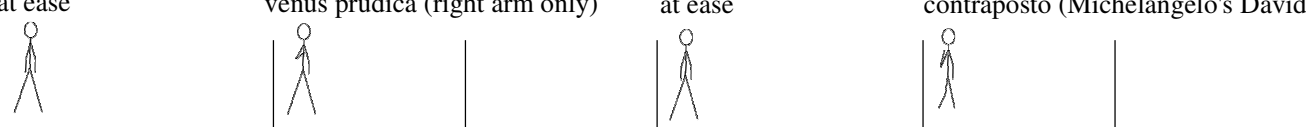
♩ = 63


V

f *mp* *f* *mp*

a → u u → m

at ease venus prudica (right arm only) at ease contraposto (Michelangelo's David)

mgc. 

el. 

glitchy matching of live voice glitchy matching of live voice

tempo libre, approx 3 seconds per measure

Centre of space is A4, top line semitone up, bottom line semitone down

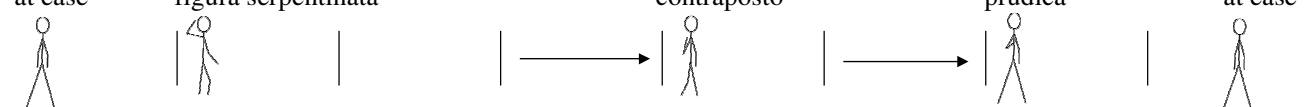
31

V

mp *mf* *mp* *p*

m → u → a

at ease figura serpentinata contraposto prudica at ease


mgc. 

39

V

mp *p* *mf* *p*

a → u → m

mgc. 


♩ = 52

47

V

mf *p* *mf* *p* *p* *mf* *p*

a → u a → u m → u → a → m

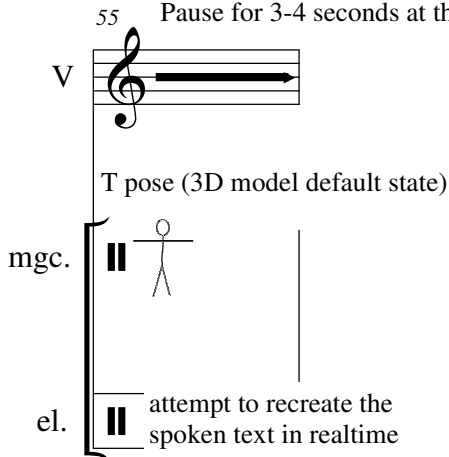
mgc. 

III - Marre Solenoid

Speak the text below clearly and with minimal affectation.

Freeze and hold the bold/underlined syllables for 5-6 seconds as they appear.

Pause for 3-4 seconds at the end of each sentence.



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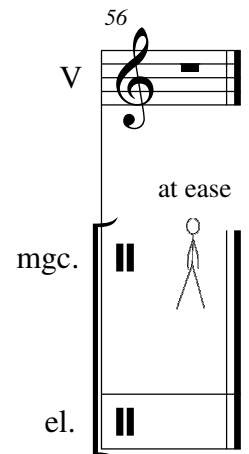
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IV - Panoramas

♩ = 72

portamento (slide into the notes throughout this song)

57 *mp*

V *p* < *mp* > *p*

ə e ə le ə le mə ə a e

mgc. || paint and image of the Panorama arcade with your fingers in the air, moving around your entire right arm in a smooth motion. →

el. || Electronics react to the speed of your arm movements and the pitch of your voice to trigger samples. →

64 *sim.*

V

ə læ u i e

71 *mp*

V

ə e ə le ə le mə ə a e ə læ

78 *p* < *mp* > *p* *sim.* *p* < *mf* > *p*

V

u i e a

86 *mp*

V

ə e ə le ə le mə ə a e ə

V - Industry is the Rival of the Arts



♩ = 96
mp *mf* *p* *mp*

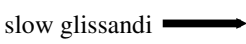
93

V

De ces pa - lais les co - linnes ma - giques

movements are slow and gradual, except during oration at fermata
 arms out hands on chest

mgc.  

el. 

99 *mf* *mp*

V



À l'a - ma - teur montrent de toutes parts, dans les ob - jets qu'é - talent leurs por -

mgc.  

106 *mf* *mp*

V

tiques que l'in - du - strie est ri - vale des arts



mgc.  

111 *p*

V

The magic columns of these palaces
 Show to the amateur on all sides,
 In the objects their porticos display,
 That industry is the rival of the arts.

orate text below the staff
 clearly and with a slow pace

mgc.  

gesture with hands freely

electronics trigger percussive syllables