Journey through utopia
For soprano and electronics

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Performance Instructions

Vowels
All vowels pronounced as Italian vowels. Vowels persist until a different vowel is indicated. Always transition to and from vowels as smoothly as possible without gliss, unless gliss indicated by an arrow.

Timing
Notes and silences longer than a whole note are given a duration in seconds, follow this during performance. Timings are indicated at regular intervals throughout the piece. Slight deviations from the given times are permissible, so long as the performer re-aligns at every system end.

Vibrato
Vibrato should only apply to the note it is attached to; adjacent notes will always return to non-vibrato

Accidentals
Accidentals apply to the note they precede. Notes without accidentals are natural.

Microtones
Some pitches are to be performed as overtones. These should be as close to natural overtones as possible (indicated in cents). They are indicated in the score with quarter tone accidentals and should be tuned as follows:

Electronic sound description
There are three main components to the electronic sound that will respond to the player's input:
   1) delay
   2) pitch shifting
   3) spatialization
All of these processes are intended to result in a sonic environment in which individual delay lines are indistinguishable from one another. The result is that, especially with the low dynamics in the vocal part, there will be an element of disembodiment to the vocalist. There are 8 delay lines, which range between 3 and 11 seconds each. Each delay line is individually localized within the 8-channel field and pitch-shifted individually.

Tech Rider and detailed electronic information

Required hardware:

Laptop equipped with Max software (or with application build of required software)
Audio interface, connected to computer
Cable to connect audio interface to mixer
Mixer with at least 8 channels of output
Output cables from mixer to 8 loudspeakers
8 loudspeakers
1 microphone, preferably clip-on or contact microphone
XLR cable for connecting microphone into mixer or interface

Software:

Software contains the ability to receive input on one channel (the voice).
This input is then sent into eight separate delay lines:
1) each delay line is to be set between the ranges of 300-11000ms
2) each delay line should have a "variant range" in which it can span throughout the piece; the input volume will determine this value
3) feedback should also be dependent on input volume
4) higher volume will result in shorter delay time and more feedback, and lower volume will result in longer delay time and less feedback

These delay lines are also sent through a pitch shifter:
1) The change in pitch is determined by the inter-onset duration
2) Depending on the duration between two successive pitches, one of the pre-set pitch shift values is chosen
3) The change between pitches should be smooth, but with no portamento or glissando
4) If inter-onset duration exceeds 40 seconds, or fails to trigger due to software malfunction or error in audio detection, a new pitch will be chosen at random
5) The amount of pitches to be changed at any given moment is dependent on the inter-onset duration; extremely long inter-onset values result in all pitches changing, and short values result in only one pitch changing
6) Pitches are pure, just-intonation intervals of unison, M2, M3, P4, P5, and octave

These pitch-shifted delay lines are then spatialized:

1) Pre-set spatial trajectories are put in place prior to performance
2) These trajectories must span the entire sound field
3) The initial setting of spatialization will be very slow, with slight increase in speed when input volume increases
4) Most spatialization changes will be perceptually minute, but the result is that the sound is continuously coming from all areas of the sound field, but not stable
5) Sources should all move at different speed.

Journey through Utopia

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♩ = 60 (when rhythms notated)

sempre non-dim, non-vibrato
ppp unless shown otherwise

Voice

:15 *ppp* < *p*

:26

:31

All quarter notes
as steady and even as
possible *p*

11s   11s

a   a → u   a

Vce.

ppp   :48   :59 *ppp* < *p*   1:14

17s   11s silence   11s

a   a

Vce.

p   1:31   1:49

17s   11s   7s silence

p

a   u

Vce.

1:56 (non-vib)   2:11   2:22

ppp < *p*   7s silence   *p*

7s   11s

a   u   a   a

Vce.

(non-vib) *ppp*   2:33 *pppp*   *p* < *mp*   2:50   3:01

(non-vib)

7s   17s   11s

u   u   a

Vce.

p   3:12 > *pp* < *p* < *mp* > *p* < *mp*   3:26

7s   7s   7s

a   u   a   u

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