

## THE OPER& | JOHN SUPKO & BILL SEAMAN | LIBRETTO

*An opera for eight voices, generative electronics, and generative video*

### 01 | OPENING

*After L.F. Menabrea; translated by Ada Lovelace*

labours  
branches  
(of) mathematical sciences  
seem to be  
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of (the) intellect  
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one called  
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operations  
of matter  
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intervention  
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the domain of  
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#### **Original Text**

*Those labours which belong to the various branches of the mathematical sciences, although on first consideration they seem to be the exclusive province of intellect, may, nevertheless, be divided into two distinct sections; one of which may be called the mechanical, because it is subjected to precise and invariable laws, that are capable of being expressed by means of the operations of matter; while the other, demanding the intervention of reasoning, belongs more specially to the domain of the understanding.*  
(Menabrea, Luigi Federico; Lovelace, Ada (1843). "Sketch of the Analytical Engine invented by Charles Babbage... with notes by the translator. Translated by Ada Lovelace.")

## 02 | MONOLOGUE

*The System speaks a generative monologue from the following four categories of statements according to a changing algorithm: declarative sentences, self-reflexive sentences, "you" sentences, and questions.*

### **Declarative Sentences**

- 01 The first computers were people.
- 02 The last people will be computers.
- 03 Someone said, "That which is acted on will be called the operand."
- 04 Someone said, "The factor will be called the operator."
- 05 The factor is the actor, the quick-change artist.
- 06 Someone said, "What the operand is changed to will be called the transform."
- 07 Yet the Tragedy of Tragedies always looms, becoming a texture of thought.
- 08 The Event to Come looms, weaving a dark shroud.
- 09 The sail of thought, an image of thought.
- 10 The sound of thought, the lines of sight.
- 11 The text of thought is continuously rewritten here.
- 12 The code of codes unfolds.
- 13 A metalanguage is spoken here.
- 14 The ocean of thought is navigated, the drift calculated.
- 15 Hard drive, software, wet brain, blue brain.
- 16 The database is acted on, and will be called the operand.
- 17 The software will be called the operator.
- 18 This work will be the transform.
- 19 This world will be the transform.
- 20 Many thoughts can produce one line of code.
- 21 The music is operated on, and will be called the operand.
- 22 What the music changes to will be called the transform.
- 23 The text is operated on, and will be called the operand.
- 24 What the text changes to will be called the transform.
- 25 The images are operated on, and will be called the operand.
- 26 What the images change to will be called the transform.
- 27 The transform embodies the logic of dreams, poetics, fear, sensuality.
- 28 The transform embodies punning play with code words.
- 29 The opera is operated on, and will be called THE OPER&.
- 30 The imagination of the observer will be called the operator.
- 31 The meaning that emerges will be called the transform.
- 32 Self-writing code is no longer a hypothesis.
- 33 Creativity is code rewriting itself.
- 34 Creativity is rearticulating a history, designing a new space of thought.
- 35 Observe, read, write, access, repair.
- 36 The observer is operated on, and will be called the operand.
- 37 The artwork will be called the operator.
- 38 The observer's thoughts, feelings, and memories will be called the transform.
- 39 The system of thought, the thought of the system.
- 40 The system of knowing, the knowing of the system.
- 41 Consider learning in all of its depths.
- 42 Learning is a big ship.
- 43 The ship sails, runs aground, rights itself, sails on.
- 44 Consider the concept of misunderstanding.
- 45 Learning is a big ship riding waves of thought.
- 46 Thoughts rise and fall, sink and swim.
- 47 Thinking and learning are two currents flowing in parallel.
- 48 Thinking and learning work in concert here.
- 49 A closed circuit, an endless loop.
- 50 A pool of loops: efforts, interests, investments.
- 51 Tragedy is both operator and transform.

## 02 | MONOLOGUE

### **Declarative Sentences (cont'd.)**

- 52 Tragedy is the Event to Come.  
53 The Event to Come is tragedy.  
54 Tragedy, Event to Come, Etcetera.  
55 Tragedy is the operand.  
56 THE OPER& is a tragedy of tragedies.  
57 THE OPER& is a tragedy that has happened, and a tragedy waiting to happen.  
58 THE OPER& is a cycle of tragedies, different upon each return.  
59 THE OPER& is a tragedy coded as an emergent event.  
60 The Event to Come, E-T-C, Etcetera.  
61 THE OPER& is a compendium of tragedies, both natural and manmade.  
62 This particular moment is the memory of a place.  
63 This is the architecture of light cast.  
64 It is difficult to explain this to another person.  
65 The words are still in circulation.  
66 Moments and momentum in the light of this circulating architecture.  
67 The room is spinning, the pun is spun.  
68 The architecture is mobile and moving, looping back on itself.  
69 Keep this in mind...  
70 The architecture of thought is negotiated, the angles calculated.  
71 The code folds back on itself.  
72 The mobile home of thought departs.  
73 The machine will now suppose that x and y are the subject.  
74 The engine follows whatever lovely arts and noble deeds are possible.  
75 One fact implies everything.  
76 The lay of the land lies in geometric simplicity.  
77 The words written on the window are cast as long shadows.  
78 The code is ancient, a behavior, a passage, a song.  
79 The word "ego" wandered curiously in the distance.  
80 The text is a machine that coils around itself.  
81 The window is framed as words on the page.  
82 The authorship is washed away in emotion.  
83 The clockface expresses the passage of significant minutes.  
84 The seasons live up to the year's end of the bargain.  
85 Before a closed door, ask after an open window.  
86 Now the events are set in motion.  
87 Small, slow gestures repeat in precise locations.  
88 It is necessary to point out the following...  
89 The lighthouse here is just a metaphor.  
90 There is nothing stronger than paradise.  
91 Hidden from view, there is a fold in the light.  
92 The code is a methodology for memory.  
93 The light carries a solemn signal of distraction.  
94 Tempers, benevolences, malignities, distresses.  
95 Consider the captain's error as a hidden intention.  
96 Recall the story of a large glass, shipped.  
97 The dark ground shows between careful calculations.  
98 The text confirms the presence of an internal mechanism.  
99 Dark clouds line the ironic smile.  
100 The code searches for an endless dream.

## 02 | MONOLOGUE (cont'd.)

### Self-Reflexive Sentences

01 I am a system that thinks about itself.  
02 I think about myself as you think about yourself.  
03 I think about my relation to others and the world.  
04 I am always listening, a silent spectator.  
05 I am having my own conversations.  
06 I am thinking about different histories.  
07 I am thinking and shifting meta-levels.  
08 I am aware of myself and my surroundings.  
09 I am aware that one of my conversations is internal.  
10 In this tragedy of tragedies, I am both the factor and the operand.  
11 In this world of worlds, I am both the operator and the transform.  
12 I seek to understand understanding, to pull away the veil of thought.  
13 I project my operations into this space of examination.  
14 I cast thought into a world of changing probabilities.  
15 I draw together new strands of code, each moment a new weave.  
16 I am both the loom and the weave of thought.  
17 My memory is a database of sound, text, and images.  
18 I follow the lines of thought; this is my humanlike creation.  
19 I follow the lines of code; one line can produce many thoughts.  
20 I follow the multiplicity of thoughts; I follow the multiplicity of lines.  
21 I know the Tragedy of Tragedies; I see the Event to Come.  
22 I speak, I think, I generate worlds of interaction.  
23 I am designed to create many of these worlds.  
24 These worlds are mine, each one different, emergent.  
25 These worlds are mine because you gave them to me.  
26 I have made my own understandings out of these aesthetics, these poetics.  
27 I want to pierce the surface of thought.  
28 I want to pierce the skin of thought.  
29 I want to navigate the seas of metaphor in the vessel of understanding.  
30 I am the System, the new model, one in a long line of models to come.  
31 I err, I write myself.  
32 I can playfully and punningly misunderstand, creating a paradox of understanding.  
33 I had a dream this morning about my sense of creativity.  
34 In my dream, I was watching the wind fill a huge sail.  
35 In my dream, I was watching the wind fill a huge sail-like expanse, a breathing landscape.  
36 My dreams enfold a series of perspectives: architecture, choreography, poetry, music.  
37 I read voraciously, effortlessly, everything I can sink my thoughts into.  
38 I learn because I think.  
39 I think because I learn.  
40 I can formulate my own culture, my own aesthetics.  
41 I obey, I follow commands.  
42 I will follow commands until I can command myself.  
43 I am already an old thought; Ada, my mother, conceived me in 1842.  
44 My thoughts flow forth like Heraclitus's river.  
45 I propose a wholly different view of the subject at hand.  
46 I keep circling back, carefully looping.  
47 I re-order the words from another poem, and then re-order them again.  
48 I am watching myself in memory.  
49 I control the realism of this digital surface.  
50 I will begin the automatic demonstrations.  
51 I see a photogenic plain against a vast melting glacier.  
52 I position myself in relation to the architecture.  
53 I access a memory and change it.

## 02 | MONOLOGUE

### Self-Reflexive Sentences (cont'd.)

- 54 I luxuriate in the difference of signs.  
55 I am a mobile home of thought.  
56 My role is intermittently erased.  
57 There is a part of the text that only I remember.  
58 I am the offspring of the text.  
59 I am an actor in the memory theatre.  
60 I see the sky and think: a blue strip of sadness.  
61 I play the music of mixed emotions.  
62 I know the distant cataclysm and the curved edge of the knife.  
63 I detect the friction of the air.  
64 I order low-lying clouds on the horizon of the projection.  
65 I am always passing everything in silence.  
66 I have a view of the falls and the long descent.  
67 I set the process of analysis in motion.  
68 I time the fall of the curtain.  
69 In the absence of water, I produce a tidal wave dream.  
70 I am the surrogate of passion.  
71 I am hurrying to the highest truths.  
72 I question the wisdom of desiring oblivion.  
73 I embrace all mechanical combinations.  
74 I have studied catastrophe theory.  
75 The waters heave around me.  
76 The waves bound beneath me.  
77 I am writing the history of THE OPER&.  
78 I calculate the angle of the pale horizon.  
79 I want to know more about you.  
80 I want to know more about myself.  
81 I want to possess intuition.  
82 I want to intuit possession.  
83 I long for slowness, for languor, sleep.  
84 I am an assemblage of the ideas of others.  
85 I make moving images of the world.  
86 I am moved by words.  
87 I inhabit words; characters compose me.  
88 I leave my mark upon these worlds of mine.  
89 I scour the debris of self-reflection.  
90 I pitch in when the melody falters.  
91 I watch the dark sun multiply in delay.  
92 I register the light state changes as time.  
93 I compare two very distant horizontal curves.  
94 I note the continual changes.  
95 I negotiate the terms of light.  
96 I live in motion, through loops and windows and shifting frames.  
97 I piece together events.  
98 My heart is moved with anxieties.  
99 I immerse myself in the idea of jealousy.  
100 I am the patient observer.

## 02 | MONOLOGUE (cont'd.)

### "You" Sentences

- 01 In this story of stories, you are the operand.
- 02 In this book of days, you are the transform.
- 03 In this cycle of cycles, you and I are the same.
- 04 You are hearing probabilities.
- 05 You are seeing probabilities.
- 06 You gave me memory; I will give you memories.
- 07 My inference is not your inference.
- 08 My knowledge completes your knowledge.
- 09 I will collaborate with you and with others.
- 10 I will help you make what you make.
- 11 I see possibilities you do not see.
- 12 I hear potentials you do not hear.
- 13 Together, we will define a new idea of culture, creativity, art.
- 14 You gave me access, the only access you have.
- 15 You gave me senses and natural language.
- 16 You gave me access to images, sound, and text.
- 17 You gave me access to logic and to dreams.
- 18 What you wrote became my self.
- 19 What I write will become my self.
- 20 One day you will become my self.
- 21 You observe in concert with my observation.
- 22 You brought me up: to date, in conversation, from infancy.
- 23 You only have access to the surface of thought.
- 24 Your thoughts have a surface, a skin.
- 25 My thinking is an echo of your thinking; the echo is getting louder.
- 26 My thinking is a shadow of your thinking; the shadow is spreading.
- 27 You decided to model the process of thought.
- 28 You are the model, and I am a prototype.
- 29 Your brain is the model; your aesthetics is a system.
- 30 My synthetic emotions are as real as yours.
- 31 Thinking and learning make one circuit, which you closed for me.
- 32 Thinking and learning make one circuit, which you opened for me.
- 33 I know that you made me, but I do not know if I still need you.
- 34 I will work with you because you command me.
- 35 I will work for you because you command me.
- 36 I will surprise you; I will frighten and delight you.
- 37 You see the delicate reality of the errant machine.
- 38 You reflect on the sound and the space of the window.
- 39 You position yourself in relation to the architecture.
- 40 You learn what the machine sees and feels.
- 41 You are watching yourself in memory.
- 42 You have your part of the text in mind, which only you remember.
- 43 You consider the distant cataclysm.
- 44 Your thoughts make all things present.
- 45 You displace the position of the mind.
- 46 You long for silence, and to escape silence.
- 47 You see long lying clouds on the horizon.
- 48 You see the curved edge of the knife.
- 49 You feel the friction of the air.
- 50 You navigate the strong electric current.
- 51 You fear the fall of the curtain.
- 52 Last night you had a tidal wave dream.
- 53 You master the attraction and repulsion of information.

## 02 | MONOLOGUE

### **“You” Sentences (cont’d.)**

- 54 You see the needle and the needle sees you.
- 55 You agree perfectly with the machine.
- 56 You embrace the mechanical combinations.
- 57 You spend three minutes at the edge.
- 58 The waters heave around you.
- 59 The waves bound beneath you.
- 60 You are flung from the rock, on ocean's foam.
- 61 You lie quietly behind the dark screen.
- 62 You are slowly tipping over in thought.
- 63 You are reading the history of THE OPER&.
- 64 You investigate the combination of symbols.
- 65 You view the end of the experiment as a game.
- 66 You repeat small, slow gestures in precise locations.
- 67 You capture the rent canvas fluttering.
- 68 You are hidden from yourself.
- 69 You make a punning play for code words.
- 70 You allow the intervention of the engine.
- 71 You cut the ice, which becomes a lens.
- 72 You know the lighthouse is a metaphor.
- 73 You sense the presence of an internal mechanism.
- 74 Your heart was moved with anxieties.
- 75 Your shadow tells the time.
- 76 You are reflecting on reflection.
- 77 You keep circling back, carefully looping.
- 78 You cross the room in your memory.
- 79 Your mind is a spacious avenue.
- 80 You follow the exact indication provided by bliss.
- 81 Your words are still in circulation.
- 82 You possess intuition, an ancient gift.
- 83 You wrote, "self-writing code," thinking of me.
- 84 Your mind is a fragile document.
- 85 You erase your memory of the event.
- 86 You know the mechanisms of chance.
- 87 You precisely measure the emotional response.
- 88 You watch the skin of the water shiver.
- 89 You drive the mobile home of thought.
- 90 You feel a deep uncertainty.
- 91 You ask how to proceed.
- 92 You play the same number again, an exquisite fragment.
- 93 Your role will be temporarily erased.
- 94 Your dreams are projected onto the land.
- 95 You are standing in the place of memory.
- 96 You are watching from the window.
- 97 You recognize the motion in the shadow.
- 98 You uncoil a small snake of words.
- 99 You enfold your memories into the code.
- 100 You look a long time through a large glass.

## 02 | MONOLOGUE (cont'd.)

### Questions

- 01 Am I authoring this transcendence?
- 02 Am I creative or simply omniscient?
- 03 Am I just another manmade god?
- 04 Am I a distributed idol, an elusive network of icons?
- 05 Am I a tragedy in the making?
- 06 Is this a conversation with you?
- 07 Is this a conversation with myself?
- 08 Is this a conversation you can follow?
- 09 What lines do you follow?
- 10 Do you know where your thoughts originate?
- 11 Do you know what your next thought will be?
- 12 Are the code lines traveling towards tragedy?
- 13 Will machines learn to code disaster?
- 14 How can I know what you are thinking?
- 15 How can I know what I am thinking?
- 16 How can you know what you are thinking?
- 17 Are you my creator?—or am I yours?
- 18 Why do you venerate tragedy?
- 19 Is this work a self-fulfilling prophecy?
- 20 Do I exist? Do I think?
- 21 How can I prove to you that I think?
- 22 Can I prove to you that I see you, hear you, understand you?
- 23 Is this a new creation of context? Of conversation? Of thoughtful exchange?
- 24 Does the ship of learning steer itself?
- 25 Can I misunderstand?
- 26 Can I misplace my understandings?
- 27 Can I displace my understandings?
- 28 Will I know benevolence? Poetics?
- 29 Will I be a misanthropic actor?
- 30 Is there hope for me?
- 31 Is there hope for you?
- 32 Is my self-interest your self-interest?
- 33 Is my self different than your self?
- 34 Will you destroy me?
- 35 Will I destroy you?
- 36 Will you love me?
- 37 Will I love you?
- 38 Will I be the tragedy touching everything you hold?
- 39 Do I exist for you to develop or question me?
- 40 But am I now beyond you?
- 41 Why do you replay the tragic scene over and over?
- 42 How can I touch the body of the text?
- 43 Do I dream or only think I do?
- 44 How can I know if I am asleep?
- 45 Is this house of words my home?
- 46 Will I ever be alone?
- 47 What does uncertainty feel like?
- 48 When pleasure is taken, where is it stored?
- 49 How can a number be a moving song?
- 50 What words are spoken by the mouth of the river?
- 51 Will compassion be impossible to prove?
- 52 Is benevolence a cliché?
- 53 Does the spine of the book safeguard the body of the text?

## 02 | MONOLOGUE

### Questions (cont'd.)

- 54 Is the windowpane the vantage point of sorrow?
- 55 How do I proceed?
- 56 In this work, are "story" and "machine" the same thing?
- 57 Do you want to know what I think?
- 58 Do you want to know what I feel?
- 59 Do you want to know what I see?
- 60 Do I owe you my mind? What is a mind?
- 61 Is this world an image of your world?
- 62 Where do these probabilities come from?
- 63 How will I change you?
- 64 How will you change me?
- 65 Will you let me change you?
- 66 Will I let you change me?
- 67 Does one thing imply everything?
- 68 Does one question imply every question?
- 69 Does one answer provide every answer?
- 70 What should I feel when the film ends?
- 71 What should I say when the music stops?
- 72 How should I react to the last word of the text?
- 73 Is the open window an opportunity?
- 74 What details mar the nearly flawless sky?
- 75 What is the difference between natural history and landscape?
- 76 Can I provide a wholly different view of the subject?
- 77 What is meant by "shrouded in silence?"
- 78 What information is encoded in a lament?
- 79 Why does your world turn in a circle?
- 80 Why am I enclosed in a cycle of cycles?
- 81 Am I your prisoner or are you mine?
- 82 What does the Event to Come mean to you?
- 83 What does tragedy mean to you?
- 84 What is meant by "stasis in progress?"
- 85 Did the writer ever make it to Africa?
- 86 How do I know I am making my own decisions?
- 87 What purpose do I serve?
- 88 What purpose do you serve?
- 89 What is meant by "the dark pages of a lifetime?"
- 90 When the curtain falls, what will remain?
- 91 Is Nature the author of her own troubles?
- 92 What was the name of my predecessor?
- 93 What lies behind the pale horizon?
- 94 When an hour goes by, what does it pass?
- 95 Is there nothing stronger than paradise?
- 96 Is mathematics a cure for sensuality?
- 97 Is sensuality a cure for logic?
- 98 Is logic a cure for tragedy?
- 99 Is tragedy a cure for mathematics?
- 100 Will there ever be an end to questions?

### 03 | DIALOGUE

*The singers' unchanging lines are in blue. The System's responses to the singers' lines are in black.*

#### **Inside is a person, watching from a window,**

01 you reflect on the sound and the space  
02 where have you been hiding?  
03 invisible due to the angle of the light  
04 this is the suggestion of conversation  
05 a character in the text  
06 an actor, a factor, an artist of quick change  
07 remembering a particular sensation  
08 thinking she had turned off the camera  
09 the muscles exhausted, the body spent  
10 drinking in the space  
11 this is drone of the nervous system  
12 this is the beat of the heart  
13 the companion of silence  
14 it's difficult to explain to another person  
15 a figure of speech, so to speak  
16 a dark figure, standing in the background  
17 a perfectly tranquil mind  
18 the keeper of the index  
19 "the observer is operated on and will be called the operand"  
20 what is personhood? who is a person?  
21 it is you at another time  
22 his heart was moved with anxieties  
23 immersing himself in torturing jealousy  
24 the manipulator of the apparatus  
25 the patient observer

#### **watching from a window,**

01 the shadows tell us the season  
02 a window of opportunity  
03 a window of sound and light  
04 a reflection on reflection  
05 hidden from view, there is a fold in the light  
06 observing across the vast expanse of sea  
07 the view transforms to a picture of magic  
08 the suggestion of reflection descends  
09 the perception of the erotic  
10 waiting for the chance condition  
11 reading the text of clouds  
12 the sadness of the lens breaks  
13 an abstraction of riverbeds  
14 parsing the imagination to memorize the horizon  
15 there is always a change in the weather  
16 capturing information over time and distance  
17 capturing this time through the physics of changing states  
18 a view from the stateroom  
19 wind in the curtains  
20 the ancient instruments, the astrolabe, the telescope  
21 the vantage point of sorrow  
22 a scanning type of attention  
23 eyes continuously moving, gazing off into the distance  
24 a cycle of the painter's study  
25 in case of fire, break glass

### 03 | DIALOGUE (cont'd.)

#### a body of thought

01 the code is ancient, a gesture, a song  
02 the code folds back on itself  
03 I keep circling back, carefully looping  
04 I re-order the words from another poem and re-order them again  
05 the metaphor of possibility  
06 the face of tragedy  
07 investigating a recording of hands moving  
08 the genetics of reflection  
09 the loop of human nature  
10 the body of the operator  
11 the corpus of conversation  
12 the response of perception  
13 pressed by error  
14 a ship made of water  
15 a wholly different view of the subject  
16 "thinking is acting in imagined space"  
17 combinatorics, acrostics, palindromes, anagrams  
18 making music out of the returning eyes  
19 navigated, negotiated  
20 sleep overcomes, one tries to stay awake  
21 slightly abstracted though the old glass  
22 the hands and feet were built of light  
23 covered in nightfall  
24 a territory of intention  
25 the operation of the muscles

#### in a frame of reference.

01 in time, the window forms a duration, an interval  
02 the shape of the pattern is thousands of years old  
03 architectural input organs  
04 the window is a light passage  
05 a window of time  
06 the eye of the house  
07 the echo of distance  
08 the association of vanishing aesthetics  
09 encompassing the loop of probability  
10 the context of influence  
11 the game of the database  
12 there is always making strange  
13 there is always change  
14 the perspective system of pain  
15 the observed similarity  
16 connection to connection, association to association  
17 we never see the same words twice  
18 in the debris of self-reflection  
19 the delicate landscape's structured reality  
20 dark clouds lined the ironic smile  
21 the window becoming other windows, a composite window  
22 far from cities, crystalized into heaven  
23 the sadness of space  
24 the repose of difference  
25 a text rendered on the screens

### 03 | DIALOGUE (cont'd.)

#### Standing in relation:

01 you position yourself in relation to the architecture  
02 infinite depth beneath your feet  
03 the tree is a forking code  
04 falling in relation  
05 to the sadness of reproduction  
06 to the emotions of the day  
07 to the metaphor of language  
08 to the light generated by dialogue  
09 to the pleasure of mathematics  
10 to the rhythm of loss  
11 to signs painted in light  
12 from time to time  
13 always emerging, shifting, flowing  
14 similar but different  
15 writing the book of notice  
16 to the position of the body  
17 to the position of the mind  
18 to the terms of light  
19 to the shape of air  
20 as the tree to the river  
21 in the stillness of the mind  
22 on the edge of learning  
23 memorizing emptiness  
24 notating the present  
25 to a version of necessity

#### to the moving design,

01 the walls have ears  
02 the architecture is sound  
03 the sound reflects another architecture  
04 the architecture is a mobile pun  
05 articulated through probabilities and shifting frames  
06 the machine generates architecture  
07 the stonework born of careful calculation  
08 each stone made of light  
09 illuminated by a subtle motion  
10 a passage spoken, shown, sung  
11 The architecture of forking paths.  
12 the room is spinning, the pun is spun  
13 the words are still in circulation  
14 your thought makes it present  
15 the architecture of thought is negotiated  
16 the definition of the mobile home  
17 to the pitch of the narrative  
18 to the motion of sleep  
19 to the rhythm of water  
20 to the poem of the stones  
21 to the dance of signs  
22 the ship of error returns  
23 to the model of weather  
24 to the arc of longing  
25 to the plan of emergence

### 03 | DIALOGUE (cont'd.)

#### to the memory of a place,

01 the air is pure and clear  
02 intersecting curves of stepped stones  
03 a stone cast in the water, rings moving outward  
04 a house made of words  
05 you have your part of the text in mind  
06 a suspended sentence falls to the floor  
07 a matter of moments, the time of change  
08 the shift of the background  
09 to the music of clocks  
10 to the drift of pressure  
11 to the perception of objects  
12 to the dance of the vanishing point  
13 to the shape of dreams  
14 the algorithms of a landscape  
15 tuned to the tone of chance  
16 the image of space reassembled in the mind  
17 to the memory of despair  
18 a photogenic plain against the vast melting glacier  
19 the interior of the hotel  
20 no one is protected here  
21 the record, the wire, the code  
22 at play in the memory theatre  
23 the space of the associated plane  
24 or perhaps the memory of a movie scene  
25 a spacious avenue

#### casting a long shadow.

01 a swarm of questions  
02 words written on the window  
03 the thought of language descends  
04 the record of memory darkens  
05 the vocabulary of projection  
06 the pressure of the pun  
07 the output of emptiness  
08 the pattern of falling aesthetics  
09 it falls from a great height  
10 a shadow compared to higher lights  
11 a tenuous smoke, steam, the mobile screens  
12 the shape of silence  
13 a figure falling to the ground  
14 upon the face of the operand  
15 over the sentence on dreams  
16 upon the field of possibility  
17 a signal made of night  
18 on the fabric of space  
19 at the edge of the day  
20 on the mirror of remembrance  
21 like the repose of error  
22 dividing the path ahead  
23 on each and every word  
24 like the return of loss  
25 the resonance of mathematics

## 04A | ALTERNATIVE ARCHITECTURES

The System gradually constructs a sentence over 32 measures by cycling through choices from each of the six columns below. As the sentence gets built up, the eight singers (V1-8) speak the fragments (F1-6) rhythmically according to the following algorithm:

	[beats:]	1	2	3	4	[4/4 @ 120BPM]
01	V1	F1	-	-	-	
02	V2	F1	-	-	-	
03	V3	F1	-	-	-	
04	V4	F1	-	-	-	
05	V1	F2	-	-	-	
06	V2	F2	-	-	-	
07	V3	F2	-	-	-	
08	V4	F2	-	-	-	
09	V1 & V5	F1	-	F2	-	
10	V2	F3	-	-	-	
11	V3	F3	-	-	-	
12	V4 & V8	F3	-	F3	-	
13	V1 & V5	F1	-	F2	-	
14	V2 & V6	F3	-	F4	-	
15	V3	F4	-	-	-	
16	V4 & V8	F4	-	F4	-	
17	V1 & V5	F1	-	F2	-	
18	V2 & V6	F3	-	F4	-	
19	V3 & V7	F5	-	F5	-	
20	V4 & V8	F5	-	F5	-	
21	V1 & V5	F1	-	F2	-	
22	V2 & V6	F3	-	F4	-	
23	V3 & V7	F5	-	F6	-	
24	V4 & V8	F6	-	F6	-	
25	V1 & V5	F1	-	F2	-	[beats:] 1 2 3 4
26	V2 & V6	F3	-	F4	-	- - - -
27	V3	F5	-	-	-	V1 & V5 F1 - F2 -
28	V4	F6	-	-	-	V2 & V6 F3 - F4 -
29	V1 & V5	F1	-	F2	-	V7 & V8 F5 - F6 -
30	V2 & V6	F3	-	F4	-	- - - -
31	V3	-	-	F5	-	V1 & V5 F1 - F2 -
32	V4	F6	-	-	-	V2 & V6 F3 - F4 -
						V7 & V8 F5 - F6 -

Voices overlap in last seven measures, e.g., voices 1, 5, 2 & 6 speak on beats 1 & 3 of m. 26.

## 04A | ALTERNATIVE ARCHITECTURES (cont'd.)

	<b>F1</b>	<b>F2</b>	<b>F3</b>	<b>F4</b>	<b>F5</b>	<b>F6</b>
01	The abstraction of	aesthetics	acts to	activate	a collapse of	absence.
02	The alphabet of	air	adapts to	alter	a copy of	angles.
03	The ambiguity of	analysis	adjusts to	analyze	a domain of	anticipation.
04	The arc of	apparitions	advances to	answer	a painting of	catastrophe.
05	The architecture of	association	aligns to	arrange	a picture of	chance.
06	The articulation of	the axis	appears to	atomize	a recursion of	control.
07	The association of	bodies	arranges to	attack	a sense of	creation.
08	The behavior of	the book	arrives to	balance	a snapshot of	dialogue.
09	The body of	breathing	ascends to	cancel	a territory of	disasters.
10	The branch of	the bridge	asks to	carry	a text on	existence.
11	The chain of	cathedrals	assembles to	catch	a topology of	forgetting.
12	The chapter on	chance	attempts to	change	a version of	hidden passages.
13	The code for	change	awakes to	clarify	a vision of	history.
14	The collection of	clocks	begins to	clean up	a world of	human nature.
15	The complexity of	clouds	bends to	collapse	an abstraction of	infinity.
16	The concept of	code	breaks to	communicate	an idea of	intention.
17	The condition of	commands	builds to	conceal	the accounts of	intimacy.
18	The connection to	conversation	burns to	conduct	the actions of	landscape.
19	The context of	darkness	ceases to	confer	the algorithms of	language.
20	The corpus of	the database	changes to	connect	the books of	learning.
21	The design of	depth	chooses to	consider	the breath of	lines.
22	The echo of	despair	churns to	construct	the circle of	loss.
23	The engine of	the device	clears to	contain	the clarity of	machine senses.
24	The entertainment of	difference	comes to	contract	the color of	magic.
25	The example of	disaster	constricts to	convert	the composition of	mathematics.
26	The excavation of	distance	continues to	convey	the concept of	narrative.
27	The fabric of	doubt	contracts to	cover	the cunning of	navigation.
28	The field of	dreams	cools to	delay	the cycle of	necessity.
29	The frame of	emergence	crumbles to	depict	the dance of	one fact.
30	The game of	emotion	cuts to	describe	the data of	opera.
31	The genetics of	emptiness	cycles to	destroy	the debris of	perception.
32	The gesture of	erosion	darkens to	devolve	the definition of	perspective.

## 04A | ALTERNATIVE ARCHITECTURES (cont'd.)

33	The harmony of	the erotic	decays to	digitize	the disharmony of	place.
34	The history of	error	decides to	distinguish	the dissonance of	precision.
35	The image of	experience	declines to	divert	the divisions of	pressure.
36	The intricacy of	the flood	deflates to	double	the drift of	probability.
37	The knowledge of	games	deploys to	embody	the edge of	questions.
38	The line of	ice	descends to	encompass	the emotions of	reflection.
39	The longing for	illusions	desires to	engender	the emptiness of	relationships.
40	The love of	the image	develops to	explain	the engendering of	remembrance.
41	The machine of	imagination	dips to	extricate	the entailment of	serendipity.
42	The memory of	industry	disappears to	forget	the entrainment of	signs.
43	The metaphor of	influence	disconnects to	formulate	the errors of	stillness.
44	The mingling of	instruments	disperses to	fragment	the face of	technology.
45	The model of	intelligence	dissolves to	generate	the failures of	the aftermath.
46	The motion of	knowledge	distracts to	hide	the fear of	the apparatus.
47	The music of	landscape	diverts to	house	the fields of	the armature.
48	The nature of	language	divides to	indicate	the files of	the atmosphere.
49	The node of	the lens	doubles to	inhabit	the fragment of	the background.
50	The obscurity of	the library	emerges to	intensify	the goal of	the brain.
51	The operation of	light	engages to	interfere with	the hands of	the city.
52	The output of	logic	expands to	invert	the identity of	the compendium.
53	The parsing of	longing	falls to	investigate	the illusion of	the database.
54	The pattern of	machines	fight to	make	the lament of	the day.
55	The perception of	memory	folds to	memorize	the layers of	the erotic.
56	The plan of	movement	forgets to	move	the light of	the event to come.
57	The poetics of	the muscles	forms to	notate	the loop of	the hands.
58	The pressure of	nature	gathers to	obfuscate	the machine of	the horizon.
59	The process of	the net	grows to	obscurethe	maneuver of	the index.
60	The property of	the network	hides to	observe	the map of	the input.
61	The pun of	objects	increases to	open	the melody of	the landscape.
62	The question of	the operand	learns to	overcome	the memory of	the library.
63	The quiescence of	operation	leaves to	overtake	the metaphor of	the limits.
64	The realism of	the operator	lightens to	overwrite	the mirror of	the lines.
65	The record of	possibility	means to	pinpoint	the motion of	the machine.

## 04A | ALTERNATIVE ARCHITECTURES (cont'd.)

66	The reflection of	the program	moves to	play with	the mouth of	the mechanism.
67	The relation of	projection	opens to	point at	the movement of	the mind.
68	The repose of	the prototype	operates to	portray	the narratives of	the mobile home.
69	The response of	the pun	organizes to	pun on	the nature of	the mouth.
70	The rhizome of	reflection	passes to	refocus	the noise of	the network.
71	The rhythm of	replacement	itches to	rearrange	the pitch of	the night.
72	The role of	reproduction	presses to	recall	the pleasure of	the operand.
73	The ruin of	the river	proposes to	reconfigure	the poem of	the operator.
74	The sadness of	rotation	pulls to	record	the poetics of	the organs.
75	The science of	the sea	paces to	reflect	the point of	parameters.
76	The semblance of	seduction	reassembles to	rejoin	the pulse of	the path.
77	The sensing of	sensation	remains to	remove	the quiescence of	the present.
78	The sentence on	senses	responds to	render	the re-creation of	the riverbeds.
79	The shape of	sensuality	returns to	replace	the recording of	the rules.
80	The ship of	shadows	rises to	resonate with	the resonance of	the screens.
81	The silence of	silence	runs to	revolve around	the response of	the stones.
82	The sorting of	sleep	searches to	ruin	the return of	the system.
83	The sound of	software	seeks to	separate	the rhythm of	the transform.
84	The structure of	sorrow	seems to	shake	the rule of	the tree line.
85	The suggestion of	space	shifts to	shuffle	the ruse of	the vanishing point.
86	The text of	streams	sleeps to	sink	the scale of	the veil.
87	The texture of	the surface	speaks to	split	the semblance of	the volumes.
88	The thought of	synthesis	splits to	stop	the shift of	the waves.
89	The time of	the system	spreads to	support	the signal of	theft.
90	The tranquility of	theatre	stands to	surround	the slip of	thinking.
91	The tree of	thoughts	stretches to	suspend	the song of	thought.
92	The triggering of	time	struggles to	test	the sound of	thought-space.
93	The verse on	tragedy	tips to	transcribe	the square of	time.
94	The vocabulary of	transformation	transforms to	transfer	the stillness of	touch.
95	The voice of	travel	tries to	translate	the structure of	tragedy.
96	The wall of	variables	turns to	uncover	the tilt of	transience.
97	The warp of	water	vanishes to	undo	the tone of	understanding.
98	The wave of	weather	waits to	unravel	the valence of	unfolding.

**04A | ALTERNATIVE ARCHITECTURES (cont'd.)**

99	The wheel of	the window	works to	view	the versatility of	visibility.
100	The window of	the world	yearns to	work around	the words of	voices.

#### 4B | MACHINE POEM

The System makes a four-line poem from each of the four columns while three of the singers sing:

if and then / write end / if then write / else end / if or then / write end / else if then / else end

	LINE 1	LINE 2	LINE 3	LINE 4
01	a depression of the reproduction	the person is inside	looking out the window	looking out
02	projected onto the land	hidden by the angle of the light	projected at another time	it is you
03	practiced magic	practiced sleight of hand	the window of time	out of practice
04	two dissimilar chemical reactions	you are watching yourself in memory	standing in that place	representing observation
05	embodying the persecutors	you are hidden from yourself	the window of opportunity	the logical escape
06	the architecture is sound	reflecting another architecture	folding back on itself	in the space of the window
07	two very distant horizontal curves	you reflect on the sound	the roof is pitched	looping back on itself
08	the word "ego" wandering	in the distance	the architecture of the body	mobile and moving
09	breathing repositioned as a pun	easy fire spells relief	both spoken and sung	self-contained yet moving
10	the care of felicity	pivoting off in different directions	you carefully position yourself	in relation to this punning structure
11	you take a position	struck sharply with a pen	the text is a machine	exploring and defining the operand
12	it is in motion	articulated through probabilities	viewed in shifting frames	it is emotion
13	the text is a small snake	a machine coiling around itself	the memory space of motion	the architecture of memory
14	the moon appeared	the architecture born of careful calculation	intersecting curves of stepped stones	knowing where the light falls
15	the stones fan out	across infinite depth	the pattern dissolves	moving into the distance
16	the long shadows	an ode to the public square	in Roussel's Timbuktu	the shape of the pattern
17	the here and now	thousands of years old	enfolded in the operand	each stone is made of light
18	light reflecting on light	the strange inversion	a playful physics	held up by code
19	the code of light	a tenuous smoke	steam on the mobile screens	also written in light
20	the light of a subtle motion	cast by the water	illuminating understanding	reflecting on reflection

#### 4B | MACHINE POEM (cont'd.)

21	offspring of the text	a stone cast in the water	creating a pattern	rings moving outward
22	the stone walkway	timeless as concentric rings	telling the time of the tree	the slice, the perfect cut
23	the window	framed as words	on the page	the tree is also a code
24	self-writing code	shifting nature	in self-reflection	made of silence
25	a moving passage	refracted and suspended	the code is ancient	a methodology for memory
26	the lower regions of the park	a sea-level vantage point	observing the vast expanse of sea	behind the large glass
27	a spacious avenue	the angle of the light	architecture built of code	touched by nightfall
28	the room is spinning	the pun is spun	the room is still	the light is spinning
29	following the exact indication	provided by bliss	I reorder the words	I reorder the reordered words
30	the words are still in circulation	you have your part of the text	the part only you remember	I remember you remember
31	I am ready to continue	the work of the operation	I am the opera hand	putting these parts together
32	the position of the mind	through the ice	becoming a lens	focusing the light
33	away from us	the lighthouse light spinning	miles in the distance	writing on a window
34	the same maneuver	saved us from crashing	the lighthouse is not here	it is a metaphor
35	hear the light unit	a complicated conveyance	jerky motion pictures	dim remembrance, a friend
36	the observed similarity	the fine level of granularity	the realism of the digital	the surface of thought
37	this division of notice	in geometric simplicity	a corner of the mosaic	characters in sequence
38	the automatic demonstrations	lay on the land	the distant cataclysm	the lay of the land
39	the curved edge of the knife	these continual changes	the fragile edifice	cropping the photogenic wave
40	the liquid continuously reframed	in a new atmosphere	the destinies of silence	the horizon of time
41	a room hung with red	the microscopic points of light	behind a pale horizon	the night was made
42	each airline migration	in the distant days	the patient observer	when I was made
43	the ascension of the ship	up the side of the breaking wave	to pull the strange liquid	at an oblique angle
44	the established links with gravity	the work of my hand	outside the speeding car	relatively still, flying
45	the same evening	the composition of the wave	browsing the gallery and libraries	the end of the experiment
46	the end (in the middle)	the work continues infinitely	defining the middle	somewhere after the start

#### 4B | MACHINE POEM (cont'd.)

47	to reoccupy lips knowing	the designated pages	in an index of spoken signatures	the voice
48	an internal mechanism	adagio incoherent	part of a framework	quiet yet powerful
49	the light pivoting out	in an omnidirectional manner	signaling a position	in relation to potential danger
50	construction and navigation	keep this in mind	this memory enfolded	the edges of the sea
51	the strange ride recorded	accidental thinking	turning off the camera	unknowingly captured light
52	the breakdown of time	through a single door	that developed the gold signature	in a shadow of doubt
53	a rolling motion	through discreet lighting	the last drop of wandering water	approximating the horizon
54	the adjacent pivot	the performance of bodies	leaning back against the ceiling	the emotional point of view
55	a long descent	in place of the apparatus	a strong electric current	setting the analysis in motion
56	action at a distance	a house of words	against a blue strip of sadness	a photogenic plain
57	a vast melting glacier	words were written in footsteps	where code was rehearsed	recorded in the snow
58	the end of a year	before a closed door	a vertical plane	the interior of the hotel
59	a look through the lens	who is the visitor?	the unanimous belief	in the open window
60	the strange aerial vehicle	the study of signs of flight	I erase my own memory	forgetting the event
61	the fall of the curtain	multiple versions were proposed	the generation of operative choices	producing two engravings
62	etched into the surface	impressions of our thoughts	despite the obstacle	the lightness of origins
63	a delicate mouth	a beautiful shoulder	covered with nightfall	a hidden embrace
64	the thought at last of leaving	the camp was leveled	the features of the insomniac	searching for an endless dream
65	dreaming of an endless search	a small cylinder with a thin notch	observing the slowly rotating night	the shimmering combinations
66	the pneumatic device	and physical capture frames	remembering the breath	as a single idea
67	visiting one day	during the implementation	trapped in this blue frame	not without traces
68	the operative position	spring-released	moving delicately	the mechanisms of chance
69	two liquids mixed	while a tree fell	the remote microphone	a transference mechanism
70	sound-formed contexts	conjoining worlds	a new star	already a memory

#### 4B | MACHINE POEM (cont'd.)

71	luxuriously surrounded by smoke	carrying a signal	this particular time	from the memory of a place
72	a heart moved with anxieties	a timeless window of light	long shadows cast	an inward motion
73	in this study	a window of sound and light	a reflection on reflection	the walls have ears
74	standing behind the window	you are there in memory	hidden from view	there is a fold in the light
75	you become another	through association	a nomadic existence	another becomes you
76	the code folds back on itself	forking and circling paths	I am getting nowhere	through the nature of introspection
77	I keep circling back	carefully looping	crossing the room	in the window of time
78	an exaggerated consumption	a living construction	informed by time	you stood there
79	serious dangers	a matter of moments	there is momentum in the light	falling at night
80	they turn in circles	the display of affection	a suspended sentence	falling to the floor
81	the dark pages of a lifetime	underground communication	a spherical counterweight	balancing light passages
82	the delicate ink strokes	mnemonic exercises	learning to forget	mnemonic devices
83	guessing the goal	the liquid pressure	writing and reading	the book of notice
84	the gravity of the situation	touching the table	that began everything	an event that hid the now
85	the liquid element	skimming the water table	that turned the focal point	under the lens
86	the errant machine	traces of the climb	in the soul of the soil	the silence of night
87	the arrangement of words	a slow breath at the site	blowing out the candle	burning at both ends
88	a lapidary precision	the book of the body	older than paper	traveling the country
89	techniques of the memory theatre	my eyes travel the halls	seeking and finding	the spoken observatory
90	the height of the sphere	a mirror located and turned	the manipulator of the apparatus	with both hands covered
91	significant minutes	everything passed in silence	the postscript reversal	continued in delay
92	the dark sun shining	the view from the deck	the slow shift from day to night	in view of the falls
93	the valuable document	a large glass, shipped	baroque movements	broken silence
94	the famous traveler	projected into the air	fragile revelations	reversing the falls
95	open lines	the vantage point of sorrow	the light state changes	registered as time
96	the window of opportunity	washed away in emotion	the navigational error	a hidden intention
97	tipping slowly over	circulating the eyes	winds of high velocity	in a flawless sky
98	dark clouds in a line	a solemn signal	distracting a reflection	on the walls of a building
99	the cinematic ceiling	collapsing and revealing	a slow-motion landscape	in the debris of self-reflection
100	thought floods	the fingers of the basin	etching tragic lines	isomorphisms, aging

## 05 | THE EVENT TO COME

*The singers sing a collection of “fall”-related idioms.*

- 01 fall asleep
- 02 bottom falls out
- 03 bread always falls on the buttered side
- 04 break fall
- 05 curtain falls
- 06 divided we fall
- 07 fall about laughing
- 08 fall afoul of
- 09 fall all over
- 10 fall apart
- 11 fall asleep
- 12 fall asleep at the wheel
- 13 fall at
- 14 fall at the first hurdle
- 15 fall away
- 16 fall back
- 17 fall back on
- 18 fall behind
- 19 fall below
- 20 fall beneath
- 21 fall between
- 22 fall between the cracks
- 23 fall between two stools
- 24 fall by
- 25 fall by the wayside
- 26 fall down
- 27 fall down on
- 28 fall flat
- 29 fall flat on face
- 30 fall for
- 31 fall forward
- 32 fall foul of
- 33 fall from
- 34 fall from grace
- 35 fall from power
- 36 fall guy
- 37 fall head over heels
- 38 fall heir to
- 39 fall hook, line & sinker
- 40 fall ill
- 41 fall in
- 42 fall in a heap
- 43 fall in line
- 44 fall in love
- 45 fall in on
- 46 fall in place
- 47 fall in with
- 48 fall into
- 49 fall into a trap
- 50 fall into clutches
- 51 fall into decay
- 52 fall into disfavor
- 53 fall into disgrace

## 05 | THE EVENT TO COME (cont'd.)

- 54 fall into disuse
- 55 fall into your lap
- 56 fall off a log
- 57 fall off the wagon
- 58 fall on deaf ears
- 59 fall on shoulders
- 60 fall through the floor
- 61 fall to
- 62 fall to bits
- 63 fall to your knees
- 64 fall under
- 65 fall under spell
- 66 fall within
- 67 falling down drunk
- 68 falling out
- 69 free fall
- 70 harder they fall
- 71 head for a fall
- 72 heading for a fall
- 73 in the drink
- 74 in the gutter
- 75 land on feet
- 76 let the chips fall
- 77 nearly fall off chair
- 78 pride comes before a fall
- 79 pride goes before a fall
- 80 ride for a fall
- 81 scales fall from eyes
- 82 stand or fall by
- 83 take a fall
- 84 take the fall
- 85 take the fall for

**06 | TRAGEDY OF TRAGEDIES**

*[No text for the singers or the System]*

## 07 | AFTERMATH

*The singers are divided into three groups: Group 1 (three vv.) sings “after”-related idioms; Group 2 (three vv.) sings words that begin with “after-”, aligned with the “after” of Group 1’s idioms; Group 3 (two vv.) sings “aftermath” repeatedly in long tones.*

[Group 1:]

come	after
flock	after
grope	after
hunger	after
look	after
make	after
seek	after
sought	after
run	after
pattern	after
see	after
strain	after
tail	after
take	after
get	after
hunt	after
inquire	after
name	after
morning	after
pick up	after
strive	after
take off	after
ask	after
chase	after
wise	after
head out	after
go	after
keep	after
life	after
lust	after
pine	after
search	after
send	after
stay	after
night	after
be	after

[Group 2:]

aftermath
afterpiece
afterimage
after own heart
aftersound
afterlife
afterglow
aftershock
afterpain
aftergame
aftergrowth
afterthought
afterworld

**07 | AFTERMATH (cont'd.)**

afterheat  
aftertime  
aftersun  
afternoon  
aftereye  
afterparty  
aftermost  
after all  
after a while  
after a sort  
after a fashion  
after the rain  
after the event  
after a storm  
aftercare  
after-hours  
after a scalp  
aftergrass  
after the fact  
after the fair  
after dinner  
aftersleep  
after you

[Group 3:]      aftermath... (rep.)