

# *The Arrow of Time*

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*for grand piano, hand-crank siren, and fixed electronic playback*

by JORDAN DYKSTRA  
(2019)

In 4 Sections:

1. "Dreunend"
2. "Nach innen gehen"
3. "The Arrow of Time"
4. "Natura Selvaggia"

Commissioned through a grant awarded by the Netherlands-American Foundation for the  
DNK Days event on May 19, 2019 at Splendor in Amsterdam, The Netherlands:  
"Reinier van Houdt Premieres 'The Arrow of Time' by Jordan Dykstra"

Spring 2019  
Middletown, CT

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## ***The Arrow of Time*** (2019)

by JORDAN DYKSTRA

### In 4 Sections:

- 1) "Dreunend" – 5'00"
  - 2) "Nach innen gehen" – 4'30"
  - 3) "The Arrow of Time" – 8'30"
  - 4) "Natura Selvaggia" – 4'30"
- (total duration: 22'30")

### **INSTRUMENTATION**

grand piano (1)  
hand-crank siren (1)  
stereo PA for fixed electronic playback (1)

### **PROGRAM NOTES**

General description: Through engagement with the hand-crank siren and piano, the pianist interacts with the fixed electronic playback by emulating the sounds of the field recording, finding harmony with the hand-crank siren, supporting the rhythm of the beating sine tones, and adding uncanny harmonic progressions over the sounds of disarray from found sound objects.

Hand-crank siren: The siren used in the premiere performance was the Vixen VXS-1000EM, capable of 110dB, and mounted for easy access by the pianist.

Form: There are 4 sections which comprise *The Arrow of Time*. While a scored 15" pause is placed between both Section 1 and Section 2, no pause exists between Section 3 and Section 4 which overlap for around 16" (at the 18:00 mark).

Piano preparation: The piano is prepared by placing a number of time-related items – such as, but not limited to, numerous sand-timers, or many (silent) clocks, or countless oxalis plants, etc. – on top of the piano, surrounding the sheet music stand. The piano lid should remain (perhaps, slightly) opened to allow for the desired dynamic between the piano, hand-crank siren, and electronic playback.

Fixed electronic playback: The stereo playback should yield to the score's dynamic instructions as how to not overpower – but clearly support – the acoustic instruments. The PA system would benefit well from the support of a subwoofer, although having one is not a deal-breaker. Contact the composer at [jordandykstra@gmail.com](mailto:jordandykstra@gmail.com) for the playback file and with any questions that arise.

Special thanks: The Netherlands-America Foundation for their support in the commission of this project, Reinier van Houdt for exceptional playing and openness to experimentation, Koen Nutters (and DNK Days) for his generous time and energy in producing this concert, Walter Marchetti (1931-2015) for creating such profound work, Adam Forkner for help in electronic programming, Nina de Vroome for supplying field recordings of Californian bees, and last – but not least – Shelli Weiler for her loving support, throughout.

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**FIXED ELECTRONIC PLAYBACK – SCORE OUTLINE DESCRIPTION\***

**Section 1) "Dreunend" – 0:00-5:00**

- 1.1 Automated fade-in of pre-recorded siren and field recording of bees – 0:05-2:38
- 1.2 Siren playback only (cont'd) – 2:38-3:35
- 1.3 Siren and field recording of bees, automated fade-out at 4:50 – 3:35-5:00
- Pause #1 – 5:00-5:15

**Section 2) "Nach innen gehen" – 5:15-9:30**

- 2.1 Pre-recorded siren chord #1 – 5:15-6:15
- 2.2 Pre-recorded siren chord #2 – 6:15-7:15
- 2.3 Pre-recorded siren chord #3 – 7:15-8:15
- 2.4 Pre-recorded siren chord #4 – 8:15-9:15
- Pause #2 – 9:15-9:30

**Section 3) "The Arrow of Time" – 9:30-18:00**

- 3.1 Automated fade-in of 2 sine tones beating at 60bpm – 9:30-11:00
  - 3.2 Added layer of field recording of outdoors with ticking clock – 11:00-14:00
  - 3.3 Sine tone (cont'd), 60bpm beat (15:20-16:50), 30bpm beat (17:30-18:05) – 14:00-18:00
- (No pause, *attacca*)**

**Section 4) "Natura Selvaggia" – 18:00-22:30**

- 4.1 Automated fade-in of field recording, shimmering sounds, and pre-recorded siren – 18:00-22:10
- Automated fade-out (22:10)

\*Because the playback recording is fixed, once the playback is properly balanced and EQ'd, the playback operator does not need to do make any changes to the audio during the performance.

# The Arrow of Time

## 1. "Dreunend"

JORDAN DYKSTRA (2019)

1.1 ♩ = 60 0:05

Hand-crank siren

*ppp*

Piano

3

*And. pp*

13

23

31

1.2

Musical score for system 1.2, measures 31-37. The vocal line consists of a series of slurred notes. The piano accompaniment features a steady bass line with a 2:38 time marker and an asterisk at the end of the system.

38

1.3

Musical score for system 1.3, measures 38-45. The vocal line continues with slurred notes. The piano accompaniment has a 3:35 time marker.

*Red. mf*

46

Musical score for system 1.3, measures 46-52. The vocal line continues with slurred notes. The piano accompaniment continues with a steady bass line.

53

4:35 fade-out w/playback

5:00 - 5:15

Musical score for system 1.3, measures 53-59. The vocal line features a long slur over the final notes. The piano accompaniment has a 4:50 time marker and an asterisk at the end of the system.

(to Pause #1)

# The Arrow of Time

## 2. "Nach innen gehen"

JORDAN DYKSTRA (2019)

$\text{♩} = 60$

Hand-crank siren

5:00

2.1

2 5:15 Sustain somewhere inside the playback chord

*f*

5:20

*Ped. f*

8

13

6:05

6:05

\*

2 **2.2**

17 **6:15** ... inside the chord

*f*

**6:20**

*Ped. f*

23

27

**7:05**

\*

**2.3**

32 **7:15** ... inside the chord

*p*

**7:20**

*Ped. p*

38

Musical score for measures 38-41. The upper staff contains a melodic line with a long slur over four measures. The lower staff contains a bass line with quarter notes: G2, F2, E2, D2, C2, B1, A1, G1.

42

8:05

Musical score for measures 42-46. The upper staff has a melodic line with a slur over measures 42-44 and a hairpin crescendo over measures 45-46. The lower staff has a bass line with quarter notes: G2, F2, E2, D2, C2, B1, A1, G1. An asterisk is placed below the end of the piece.

2.4

47

8:15

... inside the chord

Musical score for measures 47-54. The upper staff has a melodic line with a slur over measures 47-54. The lower staff has a bass line with quarter notes: G2, F2, E2, D2, C2, B1, A1, G1. The dynamic *ff* is marked above the first measure of the upper staff and below the first measure of the lower staff. The word *Ped.* is written below the first measure of the lower staff. A time signature box with '8:20' is placed above the first measure of the upper staff.

55

9:05

9:15 - 9:30

Musical score for measures 55-58. The upper staff has a melodic line with a slur over measures 55-57 and a hairpin crescendo over measures 58-59. The lower staff has a bass line with quarter notes: G2, F2, E2, D2, C2, B1, A1, G1. The text '(to Pause #2)' is written above the end of the piece. An asterisk is placed below the end of the piece.



The Arrow of Time  
3. "The Arrow of Time"  
4. "Natura Selvaggia"

JORDAN DYKSTRA (2019)

♩ = 60

Hand-crank siren

9:15 - 9:30

Piano

2 **3.1**

9:30 (beating sine tone)

9:38 join pulse at node of sine tones after 8 "beats" (cont'd)

*p*

Ped.

7 **3.2**

11:00 - 14:00 (field recording with ticking clock) (cont'd)

*p*

12 **3.3**

14:00 (cont'd)

*p*

17

15:20 (60bpm beat) (cont'd)

*p*

22

17:30 (30bpm beat) (cont'd)

*p*

27 **4.1**

18:00 (shimmery sounds, field recordings, sirens)

*p*  
*f*

31

18:33

*ff*

39

Musical score for measures 39-46. The upper staff features a melodic line with a slur over measures 39-42 and a fermata over measure 42. The lower staff contains a bass line with notes: G2, A2, B2, C3, D3, E3, F3, G3.

47

Musical score for measures 47-54. The upper staff is mostly empty with a few notes. The lower staff contains a bass line with notes: G2, A2, B2, C3, D3, E3, F3, G3.

55

20:00

Musical score for measures 55-62. The upper staff features a melodic line with a slur over measures 55-62 and a fermata over measure 62. The lower staff contains a bass line with notes: G2, A2, B2, C3, D3, E3, F3, G3. A dynamic marking *ff* is present below the upper staff.

63

Musical score for measures 63-70. The upper staff features a melodic line with a slur over measures 63-66 and a fermata over measure 66. The lower staff contains a bass line with notes: G2, A2, B2, C3, D3, E3, F3, G3.

71

21:09

21:24

Musical score for measures 71-78. The upper staff features a melodic line of eighth notes with slurs and accents, marked with a forte (*f*) dynamic. The lower staff shows a piano accompaniment with chords and single notes.

79

22:00

Musical score for measures 79-86. The upper staff continues the melodic line with slurs and accents, marked with a fortissimo (*ff*) dynamic. The lower staff provides piano accompaniment with various chordal textures.

87

22:30

Musical score for measures 87-94. The upper staff is mostly empty, indicating a rest for the melodic line. The lower staff features piano accompaniment with chords and a final melodic flourish in the eighth measure.