

Pyrolysis

I. Black Sugar

II. Smoke Water

III. Beehive Coke

for Vibraphone, Piano and String Quartet

Kitra Razin

2019

INSTRUMENTATION

Vibraphone
Piano
2 Violins
Viola
Cello

Duration: ca. 8.5 minutes

PROGRAM NOTE

The process of pyrolysis irreversibly alters the composition of organic materials via thermal decomposition. A by-product of pyrolysis is black sugar, a shiny, powder pollutant. Additionally, pyrolysis produces a fuel from coal called coke. Coke is manufactured in brick beehive ovens.

Smoke water, though unrelated to pyrolysis, functions similarly to pyrolysis when it permanently alters seed structures during the germination of plant species.

The piece *Pyrolysis*, inspired by other chamber works, much like the chemical process itself, utilizes transformational techniques similar to pyrolytic reactions.

Each movement shares characteristics with both the chemical it is titled after and the colloquial secondary meaning.

“Black Sugar” is small (short) and sweet, and it is intended to complement as well as enhance the other movements.

“Smoke Water” is fluid with shifting tonal centers, like ripples in a lake, but its predominantly minor tonality and unorthodox modulations infuse the movement with a dark, impure, smoky quality.

“Beehive Coke” is the brightest movement and the first with an unambiguously major key, resembling an effervescent carbonated soda.

I. Black Sugar

Score

Kitra Razin

$\text{♩} = 120$

Vibraphone

Piano

Violin I

Violin II

Viola

Cello

Vib.

Pno.

Vln. I

Vln. II

Vla.

Vc.

mp *mf* *mp*

pizz. *mf* *f*

mf *p*

pizz. *f*

p *mf* *mp* *mf* *p*

A

I. Black Sugar

Score

15

Vib. *f* *p*

Pno. *f* *p* *pp*

Vln. I

Vln. II

Vla. pizz.

Vc. *sub. p*

B

21

Vib. *f* *mf*

Pno.

Vln. I *arco* *p* *mf* *mp* *f* *sul G* *p*

Vln. II *mp* *f*

Vla. *arco* *mp* *f*

Vc. *arco* *p* *mf* *mp* *f* *pizz.* *mp*

I. Black Sugar
Score

3

27

Vib.

Pno.

Vln. I

Vln. II

Vla.

Vc.

C

mp *mf* *f*

34

Vib.

Pno.

Vln. I

Vln. II

Vla.

Vc.

D

p *mf* *pp* *p* *mf*

p *mf* *pp* *mf*

pp *mp* *sub. p* *mf*

mp *sub. p* *mf*

pp *mf* *sub. p* *mf*

p *mf*

II. Smoke Water

Score

[illegible]

II. Smoke Water
Score

6

Vib. *poco a poco*

Pno.

Vln. I *poco a poco*

Vln. II *poco a poco*

Vla. *poco a poco*

Vc. *poco a poco*

8

Vib. **A** *f*

Pno. *p cresc.* *f*

Vln. I *f*

Vln. II *f*

Vla. *f*

Vc. *f*

Detailed description: This is a page from a musical score for 'II. Smoke Water'. The page contains staves for five instruments: Vibraphone (Vib.), Piano (Pno.), Violin I (Vln. I), Violin II (Vln. II), Viola (Vla.), and Cello (Vc.). The score is divided into two systems. The first system (measures 6-7) features a 'poco a poco' tempo marking. The Vibraphone part consists of eighth-note triplets. The Piano part is mostly rests. The Violins, Viola, and Cello parts feature sixteenth-note sextuplets. The second system (measures 8-9) begins with a double bar line and a repeat sign. Measure 8 continues the 'poco a poco' tempo. The Vibraphone part has a section marked 'A' and ends with a forte (*f*) dynamic. The Piano part starts with a piano (*p*) dynamic and a crescendo (*cresc.*) marking, leading to a forte (*f*) dynamic in measure 9. The Violins, Viola, and Cello parts also reach a forte (*f*) dynamic in measure 9. The score includes various musical notations such as triplets, sextuplets, slurs, and dynamic markings.

Score

7

Violin I, Violin II, Viola, and Violoncello parts, measures 10-13. The score shows a crescendo in measures 10-12, reaching a forte (f) dynamic in measure 13. The key signature is one flat (B-flat major or D minor). The time signature changes from 3/4 to 2/4 in measure 10, and then to 4/4 in measure 13. The Violin I and II parts play a melodic line with triplets in measures 10-12, and a sustained note in measure 13. The Viola and Violoncello parts play a bass line with triplets in measures 10-12, and a sustained note in measure 13.

II. Smoke Water

Score

15

Vib. *subito p* *f* *mf* *mp*

Pno. *subito p* *f* *p* *mf* *p* *mp* *pp* l.h.

Vln. I *subito p* *f* *p* *mf* *p* *mp* *pp*

Vln. II *subito p* *f* *p* *mf* *p* *mp* *pp*

Vla. *subito p* *f* *p* *mf* *p* *mp* *pp*

Vc. *subito p* *f* *p* *mf* *p* *mp* *pp*

||

B (3 + 2)

Vib. *p cresc.* *Leo.*

Pno. 17

Vln. I 17

Vln. II 17

Vla. *p cresc.*

Vc. *mp cresc.*

II. Smoke Water Score

9

(3 + 2)

20

Vib. *f* *mf* *mp* *pp* *cresc.*

Pno.

Vln. I *pp* *cresc.* pizz.

Vln. II

Vla. *f* *pmf* *p* *mf* *pp* *cresc.*

Vc. *f* *p* *mf* *p* *mf* *p* *mp* *pp* *cresc.*

23 (2 + 3) [C]

Vib. *mf* *pp* *cresc.*

Pno. *pp* *cresc.* *Red.*

Vln. I *mf* *pp* *cresc.*

Vln. II *p* *cresc.* *mf* *pp* *cresc.*

Vla. *mf*

Vc. *mf*

II. Smoke Water
Score

26

Vib.

mf dim.

Pno.

mf dim.

Vln. I

mf dim.

Vln. II

mf dim.

Vla.

p

Vc.

p

sul pont.

p



D (3 + 2)

Vib.

p

Pno.

p

Vln. I

arco sul pont.

Vln. II

ord.

Vla.

sul pont.

Vc.

sul pont.

ord.

p

Score

[illegible]

II. Smoke Water
Score

47

Vib. *f* *p* *mp* *mf*

Pno. *f* *p* *mp* *p* *mp* *mf* *mp*

Vln. I *f* *p* *mp* *p* *mp* *mf* *mp*

Vln. II *f* *p* *mp* *p* *mp* *mf* *mp*

Vla. *f* *p* *mp* *p* *mp* *mf* *mp*

Vc. *f* *p* *mp* *p* *mp* *mf* *mp*

50

Vib. *f*

Pno. *mf* *f* *legato*

Vln. I *mf* *f* *ord.*

Vln. II *mf* *f* *ord.*

Vla. *mf* *f* *sul pont.* *ord.*

Vc. *mf* *f* *ord.*

II. Smoke Water Score

52

Vib.

ff *p*

F

52

Pno.

ff *p*

52

Vln. I

ff *p*

Vln. II

ff *p*

Vla.

ff *p*

Vc.

ff *p*

[illegible]

II. Smoke Water
Score

57

Vib.

Pno.

Vln. I

Vln. II

Vla.

Vc.

57

59

Vib.

Pno.

Vln. I

Vln. II

Vla.

Vc.

mp p mf

8va

p mf

mp p mf

mp p mf

mp p mf

II. Smoke Water
Score

15

accel.

61

Vib. *p* *pp* *p* *mp*

Pno. *p* *pp* *p* *mp*

Vln. I *p* *pp* *p* *mp*

Vln. II *p* *pp* *p* *mp*

Vla. *p* *pp* *p* *mp*

Vc. *p* *pp* *p* *mp*

8^{va} legato

l.h.

63

Vib. *f*

Pno. *f*

Vln. I *f*

Vln. II *f*

Vla. *f*

Vc. *f*

8^{va}

8^{va} - 7

attacca

III. Beehive Coke

Score

$\text{♩} = 90 - 112$

Vibraphone

Piano

Violin I

Violin II

Viola

Cello

Vib.

Pno.

Vln. I

Vln. II

Vla.

Vc.

This musical score is for a piece titled 'III. Beehive Coke'. It is written in 4/4 time with a key signature of three flats (B-flat, E-flat, A-flat). The tempo is marked as quarter note = 90 - 112. The score is arranged for a large ensemble, including Vibraphone, Piano, Violin I, Violin II, Viola, Cello, Vibraphone (Vib.), Piano (Pno.), Violin I (Vln. I), Violin II (Vln. II), Viola (Vla.), and Cello (Vc.). The first system (measures 1-5) shows the Violin I and II parts with dynamic markings of *mp* and *mf*. The Viola and Cello parts also have *mf* markings. The second system (measures 6-10) shows the Violin I and II parts with dynamic markings of *mf* and *mf*. The Viola and Cello parts also have *mf* markings. The score is written for a large ensemble, including Vibraphone, Piano, Violin I, Violin II, Viola, Cello, Vibraphone (Vib.), Piano (Pno.), Violin I (Vln. I), Violin II (Vln. II), Viola (Vla.), and Cello (Vc.).

III. Beehive Coke
Score

17

11 A

Vib. *pp*

Pno.

Vln. I *pp* sul pont.

Vln. II *pp* sul pont.

Vla. *pp* sul pont.

Vc. *pp* sul pont.

16 *mf*

Vib.

Pno.

Vln. I *mf*

Vln. II *mf*

Vla. *mf*

Vc. *mf* ord.

III. Beehive Coke
Score**B**

Score for measures 18-24, Section B.

Instrument parts shown:

- Vib. (Vibraphone): Measures 18-24. Measure 18 starts with a whole note chord (F4, C5, F5) marked *p*. Measure 24 has a sixteenth-note triplet (G4, A4, B4) marked *p*.
- Pno. (Piano): Measures 18-24. Measure 24 has a sixteenth-note triplet (G4, A4, B4) marked *p*.
- Vln. I (Violin I): Measures 18-24. Measure 18 starts with a whole note chord (F4, C5, F5) marked *p*. Measure 24 has a sixteenth-note triplet (G4, A4, B4) marked *p*.
- Vln. II (Violin II): Measures 18-24. Measure 18 starts with a whole note chord (F4, C5, F5) marked *p*. Measure 24 has a sixteenth-note triplet (G4, A4, B4) marked *p*.
- Vla. (Viola): Measures 18-24. Measure 18 starts with a whole note chord (F4, C5, F5) marked *p*. Measure 24 has a sixteenth-note triplet (G4, A4, B4) marked *p*.
- Vc. (Violoncello): Measures 18-24. Measure 18 starts with a whole note chord (F4, C5, F5) marked *p*. Measure 24 has a sixteenth-note triplet (G4, A4, B4) marked *p*.

Measure numbers 20 and 24 are indicated at the start of their respective staves.

=

C

Score for measures 25-29, Section C.

Instrument parts shown:

- Vib. (Vibraphone): Measures 25-29. Measure 25 starts with a whole note chord (F4, C5, F5) marked *p*. Measure 29 has a sixteenth-note triplet (G4, A4, B4) marked *p*.
- Pno. (Piano): Measures 25-29. Measure 25 starts with a whole note chord (F4, C5, F5) marked *p*. Measure 29 has a sixteenth-note triplet (G4, A4, B4) marked *p*.
- Vln. I (Violin I): Measures 25-29. Measure 25 starts with a whole note chord (F4, C5, F5) marked *p*. Measure 29 has a sixteenth-note triplet (G4, A4, B4) marked *p*.
- Vln. II (Violin II): Measures 25-29. Measure 25 starts with a whole note chord (F4, C5, F5) marked *p*. Measure 29 has a sixteenth-note triplet (G4, A4, B4) marked *p*.
- Vla. (Viola): Measures 25-29. Measure 25 starts with a whole note chord (F4, C5, F5) marked *p*. Measure 29 has a sixteenth-note triplet (G4, A4, B4) marked *p*.
- Vc. (Violoncello): Measures 25-29. Measure 25 starts with a whole note chord (F4, C5, F5) marked *p*. Measure 29 has a sixteenth-note triplet (G4, A4, B4) marked *p*.

Measure numbers 25 and 29 are indicated at the start of their respective staves.

mf

III. Beehive Coke Score

19

30

Vib.

Pno.

Vln. I

Vln. II

Vla.

Vc.

mf

mf

arco

mf

37

Vib.

Pno.

Vln. I

Vln. II

Vla.

Vc.

mf

mf

arco

mf

D

mf

The musical score is for a piece titled "III. Beehive Coke". It is a 19-page score. The instrumentation includes Vibraphone (Vib.), Piano (Pno.), Violins I and II (Vln. I, Vln. II), Viola (Vla.), and Violoncello (Vc.). The score is written in 3/4 time and features a key signature of three flats (B-flat, E-flat, A-flat). The score is divided into two systems. The first system starts at measure 30 and ends at measure 36. The second system starts at measure 37 and ends at measure 42. The score includes various musical notations such as notes, rests, beams, and slurs. Dynamics include *mf* (mezzo-forte) and *arco* (arco). A double bar line is present at the end of measure 36. A box labeled "D" is present above the Vibraphone staff in measure 41. A wedge-shaped dynamic marking is present below the Vibraphone staff in measure 41.

III. Beehive Coke
Score

42

Vib.

Pno.

Vln. I

Vln. II

Vla.

Vc.

mf

48

Vib.

Pno.

Vln. I

Vln. II

Vla.

Vc.

E

p cresc.

f

p cresc.

f

p cresc.

f

p cresc.

f