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Xenon

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PAUL EDDISON LEWIS

Xenon

Solo Cello + Electronics

2019

ca. 14'

www.eddisonstudios.com

Xenon (2019)
Paul Eddison Lewis
Duration ca. 14'
Eddison Music (ASCAP)
www.eddisonstudios.com

Dedicated to Eduard Teregulov

Instrumentation
Cello + Live Electronics

Program Notes

During the process of splitting uranium, the chemical element gives off extra neutrons and impacts a moderator, typically water. When in contact with the hydrogen nuclei, the neutrons start slowing down, eventually creating fission by hitting another uranium. This is the controlled chain reaction that takes place within a modern nuclear reactor. One method that will slow the reaction, is the use of control rods absorbing extra neutrons while others simply leak out of the reactor. This neutron dance is controlled to give a steady amount of fissions. Xenon is exceptional when absorbing neutrons. Known as a neutron poison, xenon becomes an alternative to controlling the chain reaction significantly decreasing the chances of calamity.

Although the piece *Xenon* itself is not a direct reflection of the literal neutron dance taken place within a reactor core, it is inspired by its process and the modern science that makes it possible. Effecting the population and environment, modern science plays a key role in our development towards the progression of energy consumption. It is vital to take into consideration the development of modern science over profit, creating a more environmental friendly, efficient, and cost effective livelihood for future generations. To quote a Greek proverb, "A society grows great when old men plant trees whose shade they know they shall never sit in."

Performance Notes

Technical Requirements:
The performance of this work requires the use of a Pure Data patch created by the composer.
During the performance, the cellist must switch scenes using a foot pedal, preferably connected
through bluetooth.When Pure Data is activated, the computer must have a way to listen and interact
in real time with the performer, therefore the cellist needs to be mic'd and amplified using a balanced
stereo output. For the best results, use a dynamic mic during live performance to avoid feedback problems.

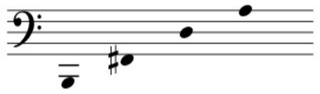
Equipment List:
- Computer with a instillation of the Pure Data program
- Audio interface
- Xenon Pure Data patch and file
- Pedal
- Dynamic instrument mic (ex. SM57)
- Stereo splitter cables.

Pure Data patch instructions:
When the Pure Data patch is in use, the performer will see the GUI screen within the program.
The patch has allready installed a saved mix and to recall the mix for a performance, simply press
the button that says "recall"

Using a pedal, each time it is pressed will activate the next scene.
Below is a brief description of each scene when activated.
Scene 1: activates the reverb
Scene 2: plays the first fixed media
Scene 3: kills the reverb and turns on the two second delay
Scene 4: kills the first playback and the two second delay. Turns on reverb
Scene 5: Plays the electronic *cadenza* and turns off reverb
Scene 6: fades the electronic cadenza, fades in the last fixed media playback and turns activates both
ten and twenty second delay.
Scene 7: shuts off all effects and playbacks.
At anytime the performaer needs to go back to a scene, press "R" to reset the patch.

Violoncello + Electronics

accordatura, sempre



Xenon

Dedicated to Eduard Teregulov

Paul Eddison Lewis

1

Con Fuoco (𝅗𝅥=52)

(Written)

Violoncello

(Sounding)

f *fff* *f* *fff* *fp* *fff* *fp* *fff* *fp* *fff* *fp* *fff* *p* *fff*

6

(Wrtn)

Vc.

(Snd)

p sub. *fff*

Rubato

Quasi Guitare *Sempre*

(𝅗𝅥 = 52)

9

(Wrtn)

Vc.

(Snd)

pizz.

mf *fp* *ff* *fp* *ff* *rall.* *ff* *mf* *f*

12

arco

(Wrtn)

Vc.

(Snd)

fff p sub. fff pp fff

III IV

15

(Wrtn)

Vc.

(Snd)

p sub. fff (slow gliss.) p sub. fff (slow gliss.) fff mp (slow gliss.)

18

G.P.

(Wrtn)

Vc.

(Snd)

fff fff fp fff p fff (slow gliss.)

(♩=46)

21

Vc.

25

rall. - - *A tempo*

p

fff

Vc.

28

(slow gliss.)

fp *fff*

III II

Vc.

31

Vc.

(𝅗𝅥 = 52)

rit.

(𝅗𝅥 = 37)

34

pizz.

arco

Vc.

2

38

Vc.

(𝅗𝅥 = 33)

41

Vc.

mp sub. *ff*

42

Vc.

43

Vc.

Simile

Simile

44

Vc.

45

Vc.

rall.

46

Vc.

pp

(♩=40)

47

simile

Vc.

ppp

mp

48

Vc.

mf

ff

49

Vc.

p sub.

ff sub.

50

sul pont.

Vc.

p sub.

fff

p sub.

51

ord.

Vc.

f

p sub.

52

Vc.

ff sub.

p sub.

53

Vc.

ff

p sub.

ff sub.

54

Vc.

sul pont.

p

fff

55 *ord.*

Vc.

mf

ff

56 *ord.*

Vc.

ff *mp*

ord.

57

Vc.

mf *ff*

58

Vc.

fff

59

Vc.

p sub.

ff sub.

60

Vc.

p sub.

ff sub.

61

Vc.

fff sub.

4

sul I

fff

62

Vc.

f fff f fff fff fff f (slow gliss.) fp fff (slow gliss.)

67

5 Rubato

Electronics Cadenza
(ca. 2'00")

Repeat *ad libitum* for 1'35"

6

Vc.

Repeat *ad libitum* for 1'35"

69

Repeat *ad libitum* until the scene completely changes

Grave rubato (𝅗𝅥=35)

Vc.

mf mp

73

Vc.

f

77

Vc.

83

Vc.

7

mp *f* *p* *n.*

* for each ceasura, hold the whole note before it until the electronic loop begins.
Continue by syncing up with electronic loop.