

Ryan Laney

THE MYSTERIOUS:
Three Poems by Famous Scientists

for Baritone and Piano

(2013)

PROGRAM NOTE

Over the last several hundred years, our knowledge of the world and our ability to navigate it have advanced at an arguably unprecedented pace. For better or for worse, we move forward, often with little consideration for the lifestyle we are leaving behind. The songs in this cycle present a series of perspectives on the role of science – on both a personal and universal level. Written by three of the most influential scientists in the past two centuries, the poems are a reflection of their composer's relation to their own work....

Thomas Edison (1847-1931) was a famous inventor, celebrated for creating the electric light bulb and the phonograph cylinder (among many other revolutionary contributions). His poem *In the Unknown Regions* depicts a flourishing land in the midst of a dangerous and volatile landscape. The poem seems to ramble from line to line; in fact, its meaning is only revealed in the last line, in which Edison suggests that what makes this land so beautiful is the absence of science.

Many regard J. Robert Oppenheimer (1904-1976) as the “father of the atomic bomb.” With an extensive education as a quantum physicist, he began work on the Manhattan Project in 1942. In *Crossing*, he describes how people tend to accept and celebrate advancements in science before thinking about its consequences. Interestingly, this poem was composed in 1928, well before the development of the atomic bomb.

James Clark Maxwell (1831-1879) is famous for his contributions to the field of physics, in which he synthesized four equations that elegantly describe all of electrodynamics. He was able to unite the forces of electricity and magnetism (called the *electromagnetic force*), and in doing so, created a more unified theory of how the universe works. In *I've Heard the Rushing*, Maxwell describes having lived a full and satisfying life despite moments of struggle.

The title of the cycle is a nod to Albert Einstein, who once said: “*The most beautiful experience we can have is the mysterious. It is the fundamental emotion that stands at the cradle of true art and true science.*”

DURATION: ca. 11 minutes

In the Unknown Regions, by Thomas Edison

In the unknown regions of the antarctic pale
1100 miles beyond the utmost limits reached by Explorers
there had been discovered by the Aerial Navigation
a region of gigantic Volcanoes all in active operation
pouring immense Volumes of Lava down to the plains.
That in the vicinity of these Lavas were large lakes of water
whose waters were continuously heated by the Volcanics
so that on the shore and for leagues back the land was arable
and covered with beautiful vegetation and highly populated
by a people of the Mongolian type and highly civilized
with a Literature of their own but without a Science.

Crossing, by J. Robert Oppenheimer

It was evening when we came to the river
with a low moon over the desert
that we had lost in the mountains, forgotten,
what with the cold and the sweating
and the ranges barring the sky.
And when we found it again,
in the dry hills down by the river,
half withered, we had
the hot winds against us.

There were two palms by the landing;
the yuccas were flowering; there was
a light on the far shore, and tamarisks.
We waited a long time, in silence.
Then we heard the oars creaking
and afterwards, I remember,
the boatman called to us.
We did not look back at the mountains.

I've Heard the Rushing, by James Clerk Maxwell

I've heard the rushing of mountain torrents, gushing
Down through the rocks, in a cataract of spray,
Onward to the ocean;
Swift seemed their motion,
Till, lost in the desert, they dwindled away.

I've learnt the story of all human glory,
I've felt high resolves growing weaker every day,
Till cares, springing round me,
With creeping tendrils bound me,
And all I once hoped for was wearing fast away.

I've seen the river rolling on for ever,
Silent and strong, without tumult or display.
In the desert arid,
Its waters never tarried,
Till far out at sea we still found them on their way.

Now no more weary we faint in deserts dreary,
Toiling alone till the closing of the day;
All now is righted,
Our souls flow on united,
Till the years and their sorrows have all died away.

In the Unknown Regions

Text by Thomas Edison

Driving, ♩. = 120

ff *guterat*

fff *p*

The piano introduction consists of two staves in 12/8 time. The right hand features a series of chords and single notes, while the left hand plays a rhythmic pattern of eighth notes. The piece begins with a fortissimo (*ff*) dynamic and a *guterat* (glissando) effect, then transitions to a fortississimo (*fff*) dynamic with a piano (*p*) marking.

4 *f tenacious*

In the un-known reg - ions of the ant - arc - tic pale

a little softer

This system contains the first line of the vocal melody and piano accompaniment. The vocal line starts at measure 4 with a fortissimo (*f*) dynamic and a *tenacious* marking. The piano accompaniment continues with a *a little softer* marking. The lyrics are: "In the un-known reg - ions of the ant - arc - tic pale".

7

el -ev-en hun - dred miles bey - ond the ut - most

f *p* *a little softer*

This system contains the second line of the vocal melody and piano accompaniment. The vocal line starts at measure 7 with a fortissimo (*f*) dynamic. The piano accompaniment continues with a piano (*p*) dynamic and a *a little softer* marking. The lyrics are: "el -ev-en hun - dred miles bey - ond the ut - most".

10

lim-its reached by Ex - plor - ers

sfz *mf* *mp*

13

There had been dis - cov - ered by

mp *p*

16

Aer - i - al Nav - i - ga - tion a

f

18

reg - ion of gi - gan - tic Vol - can - oes all in ac - tive op - er -



22

a - tion



25

pour - ing im -

27

mense Vol - umes of La - - va



30

down to the plains.

mp

sra

ppp *pp*



32

That in the vi -

pp

mf cresc. *fff*

A little slower, ♩. = 90

mf espressivo

A little slower, ♩. = 90

35

cin - i - ty of these La - vas were large lakes of

mysterious and ethereal

p



38

wa - ter whose wa - ters were con -

mp

poco cresc.



41

tin - u - ous - ly heat - ed by the Vol - can - ics

f

accel. poco a poco

mf

accel. poco a poco

44 *p* *mf*

so that on the shore and for leagues. back the land was

pp *mp*



47 *p* *mf*

a - rab - le and cov - ered with beau - ti - ful veg - e -



50 *pp*

ta - tion and high - ly pop - u - lat - ed by a

pp

53 **Tempo I**

mp

peo- ple_ of the Mon gol - i an type_____ and high - ly civ - i lized_

Tempo I

p



57

mf *f* *mp*

_____ with a Liter - a - ture_____ of their own_____ but with

pp *mf*



61

out_____ a Sci - ence._____

ppp *ff* *gently* *p*

Crossing

Text by J. Robert Oppenheimer

Desolate, ♩ = 80

First system of musical notation (measures 1-3). The piece is in 4/4 time. The right hand features a series of chords, with dynamics *fff* and *pp*, and includes a triplet of chords. The left hand has a melodic line with a triplet and a *mp* dynamic. A *pedal liberally* instruction is present in the bass clef. A fermata is placed over the final chord of the system.

Second system of musical notation (measures 4-6). The right hand continues with chords, marked *pp* and *p*, with a triplet and a *rit.* marking. The left hand features a melodic line with a triplet and a *pp* dynamic. A *quasi cadenza* instruction is present. A fermata is placed over the final chord of the system.

Third system of musical notation (measures 7-9). The tempo is marked *Poco più mosso*, ♩ = 88. The right hand features chords with a triplet and a *pp* dynamic. The left hand has a melodic line with a triplet and a *mp* dynamic. A *rit.* marking is present. A fermata is placed over the final chord of the system.

Fourth system of musical notation (measures 10-12). The tempo is marked *a tempo*. The right hand features chords with a triplet and a *mp* dynamic. The left hand has a melodic line with a triplet and a *mp* dynamic. A *rit.* marking is present. A fermata is placed over the final chord of the system.

14 Quasi recitative, ♩ = 80

mp *poco accel.*

It was eve - ning when we came to the riv - er with a *poco accel.*

Quasi recitative, ♩ = 80

pp *ppp* *pp* *sva*



18

(♩ = 100) *poco rit.*

low moon o - ver the des - ert that we had lost in the moun - tains,

(♩ = 100) *poco rit. deliberate*

mp *p* *mf*



21 A little slower, ♩ = 90

A little slower, ♩ = 90

for - got - ten, what with the cold and the

pp *listless*

23 *accel.*

sweat - ing, and the ran - ges. — bar - ring the

mf



Più mosso, ♩ = 100

25 *f*

sky.

Più mosso, ♩ = 100

f triumphant



29 With motion, ♩ = 132

mf

And when we found it a - gain, in the dry

With motion, ♩ = 132

p *rubato*

8vb

33

hills down by the ri - ver, half with - ered



37

we had the hot winds a - gainst us.

pp *p*



41

mp *poco rit.*

44

Poco meno, ♩ = 120 *rit.**mp expansive*

There were two

Poco meno, ♩ = 120 *rit.*

47 A tempo

cresc.

palms by the land - ing; the yuc - cas were flow - er - ing; there was a

A tempo

p *cresc.* *f*

51

*poco rit.**ff*

light on the far shore, and

mf *p* *mf* *poco rit.* *ff*

54 $\text{♩} = 112$

dim. *rit.*

ta - mar isks, _____ ta - mar - isks _____

$\text{♩} = 112$ *rit.*

f *dim.*



Calming down, $\text{♩} = 100$

58 *mf*

We wai - ted a long time, _____ a

Calming down, $\text{♩} = 100$

mp *gva*



62 *poco rit.*

long time _____ in si - lence. _____

p

poco rit. (s)-----|

65 Tranquil, ♩ = 90

mp

Then we

Tranquil, ♩ = 90
8^{va}

p rubato *pp*



68

heard the oars crea - - - king,

rit.

rit.

mp 8th



71 A tempo

mf *mp*

and af - ter - wards, I re -

A tempo
uneven; somewhat freely

pp

l.v.

l.v.

75

mem - ber the boat - man called to us.

p

l.v. l.v.



79

We

mp

p freely

l.v.



83

did not look back at the moun - tains.

pp

I've Heard the Rushing

Text by James Clerk Maxwell

Fast and flowing, ♩ = 132

f

I've heard the rush - ing of moun - tain tor - rents,

Fast and flowing, ♩ = 132

mp

splasy

5

gush - - ing Down through the rocks, in a

9

cat - er - act of spray, On - ward to the

13

o - cean; Swift seemed their mo - tion. Till,

mp



17

lost in the de - sert, they

morendo



21

dwin - dled a - way.

simile

p

pp

27

mp *cresc.*



31

mp *cresc.*

I've learnt the sto - ry of all hu - man glo - ry,



35

f *ff*

I've felt high re-solves grow-ing weak - er ev - 'ry

39 *mf* *poco a poco rit.*

day, _____



43



46



49 *mp* *a tempo* *(falsetto)* *mf*

Till cares, spring-ing round me, _____ With

morendo *a tempo* *pp*

Red.

54

creep - ing tend-rils bound me. _____ And

p

a little rushed; anxious

58

all I once hoped for was wear-ing fast a - way. _____

dim.

62

accel.

cresc.

ff

65

rit.

a tempo

ff

68

pp *simile* *p*

74

p
I've seen the riv - er

78

roll - ing on for - ev - er,

83

mf *freely* *mf* *pp*
Sil - ent and strong, with-out tum - ult or dis - play.

Ped.

88

In the des - ert a - rid,

p *pp*

(8)



93

Its wat - ers nev - er tar - ried, Till

p *pp*

(8)



97

far out at sea we still found them on their way.

mp *mf* *p*

101

8^{va}

pp

8^{va}

8^{va}



106

mp

Now no more wear - y we faint in des - erts drear - y,

(8)

ppp

(8)



111

p

(8)

113 *f*

Toil - - ing a - lone till the



115

clos - ing of the day;



119 *p* *poco rit.* *mf*

All now is right - ed, Our

121 Slightly slower, ♩ = 120

musical score for measures 121-122. The vocal line is in bass clef, 3/4 time, with lyrics: "souls flow on u - - ni - -". The piano accompaniment is in treble and bass clefs, 3/4 time, with a dynamic marking of *mf*. The key signature has two sharps (F# and C#).



123

musical score for measures 123-126. The vocal line is in bass clef, with lyrics: "ted, Till the years and their sor - rows have". The piano accompaniment is in treble and bass clefs, with dynamic markings of *mp* and *morendo al fin*. The key signature has two sharps (F# and C#).



127

musical score for measures 127-130. The vocal line is in bass clef, with lyrics: "all died a - way.". The piano accompaniment is in treble and bass clefs, with dynamic markings of *pp* and *8va*. The key signature has two sharps (F# and C#).