

STEVEN LAMPHEAR

Q.E.D.

FOR PIANO, VIOLIN AND CELLO

### *About the piece:*

*Q.E.D.* is a composition for piano, violin, and cello that was composed between August of 2011 and October of 2012. It is unified through the use of various transformations of a principal motive, which is presented by the violin in the first two measures of the piece.

This motive was created to provide variety in rhythm and melody. The rhythmic content is generated from fragments inherent in the principal motive, with many rhythmic events being projected in triple and quintuple groupings. Pitch and interval content used throughout the piece also borrows fragments from the principal motive. This primary motive reappears throughout the piece to initiate or conclude important structural regions. However, even material that is not part of a complete statement of the motive still consists largely of fragments from it.

The transformations of the principal motive provide a variety of moods and styles in both tonal and atonal contexts. For instance the principal motive includes scale degrees 1, 2, 3, 5, 6, 6#, and 7# in the key of E minor. The counterpoint and harmony supporting this motive can either exploit these tonal tendencies or avoid them. The changes in style and aesthetic roughly divide the piece into three main parts: (1) a frenetic opening, (2) a slow and tranquil middle section, and (3) an explosive ending that returns to the faster tempo of the opening. Though each section includes the motive in various guises, the middle section does not contain any explicit statements of the motive, thus creating a contrast to the outer sections. The return of the motive is used to mark the beginning of the final section.

The title of the piece is "Q.E.D." ("quod erat demonstrandum" or "which was to be demonstrated"). This initialism is commonly used in mathematics and philosophy to signal the completion of a proof or argument. Since this piece served as my Master's thesis, this title serves as an emblem of my compositional endeavors and completion of my graduate studies at the Master's level.

-Steven Lamphear, November 2012

*Approximate Duration:* 7 minutes

# Q.E.D.

STEVEN LAMPHEAR

$\text{♩} = 120$

Violin

Cello

Piano

*mp*  $\leftarrow$  *f* 3

5

*z* *sub mp*  $\leftarrow$  *ff*

3

pizz.

*mf* 3

*fff*

*ppp*  $\leftarrow$  *f* 3  $\rightarrow$  *n*

*f*  $\leftarrow$  *ff*

*f* 5

*ppp*  $\leftarrow$

7 A

8<sup>va</sup>

*f*  $\overset{5}{\curvearrowright}$  *ff*

*pizz.*

*arco*

*ff*

*pp*  $\curvearrowright$  *f*

*f*  $\overset{5}{\curvearrowright}$  *ff*

*ff*

*subito pp*

10

*n*

*mf*  $\curvearrowright$  *f*

*sub mp*  $\curvearrowright$  *f*

*mf*  $\curvearrowright$  *f*

*pp*

12 *8va*

*ff* *f* *5* *fff*

*f* *5* *fff*

*f* *5* *fff*

*ff*

13 (8)

*mp* *5* *ppp*

*n* *ppp*

*sub. mp* *sub. ff*

*5* *15mb*

3

16 **B** arco  $3:2$   $8^{va}$

*ff* *mp*  $3:2$   $3:2$   $3:2$   $3:2$   $3:2$

*mf* *p*  $3:2$   $3:2$

$8^{va}$   $8^{vb}$

19 (8)

*mp*  $5:4$   $3:2$   $5:4$   $3$

$8^{vb}$



26 **D**

*fff* 3 5

*fff* 3 5

*ff* 3 3:2

*ff* 8vb

28

*mf* *fff* 3

*mf* *fff* 3

*mf* *fff*



30

**E**

8<sup>va</sup>

*f* *ff* *n*

*f* *ff* *mp*

8<sup>vb</sup>

32

pizz.

*mp* *n* *ppp* *mp* 3:2

*pp*

(8)

34

4+1/2

4+1/2

*n*

*n*

*8va*

*ppp*

5:4

7:4

(8)

Sos. Ped.

\*

35

4/2

4/2

*mf* > *mp*

*f*

5

3

3:2

5:4

(8)

*pp*

*pppp*

(8)

Ped.

38

**F**

*mp* *f* *mf*

*pp* *ff* *mf*

*pizz.*

(8)

41

*pp* *ff* *pppp*

*8va*

*8vb*

45

8)

49

8va

8vb

52

arco

*ff*

**G**

arco

*ff*

8va

8vb

54

*fff*

3

5

3

5

3/4

4/4

3/4

4/4

3/4

4/4

*mp*

8

56

*fff*

*fff*

*ff*

*fff*

*mp*

8vb

58 **H** ♩ = 52

*pp*

*pppp*

8vb

64

sul tasto

*ppp*

sul tasto

*ppp*

*ppp*

(8).....

70

ord.

*mf*

ord.

*mf*

(8).....

76 **I**

76 **I**

*p* *pp*

*p* *pp* *p*

*pp*

*pp*

8<sup>vb</sup>

81

81

*p* *pp* *mp* *p*

8



85

3

*p*

(8).....

89

J

*n*

*ppp*

(8).....



101

Violin part:  $f$  (triplet),  $n$ ,  $mp$  (3:2)

Piano part:  $f$ ,  $ppp$  (triplet),  $f$  (3:2),  $pp$

Performance instructions: arco sul tasto, Ped.

105

Violin part:  $ppp$ ,  $pp$ ,  $fp$

Piano part:  $ppp$ ,  $cresc.$ ,  $mf$

Performance instructions: ord.

108 ord.

*f* *3* *5* *ppp*

*f* *pp* *mp* *p*

*5* *3:2*

*Red.*

110

*ppp* *ff* *mf*

*pizz.* *arco*

*mf sub. mp cresc.*

*3* *6* *7* *5* *5*

111

$\text{♩} = 120$

**L**

ff *ffp* *f* *p*

*pizz.*

*f* *mp*

*8va<sup>-</sup>*

*5*

*3*

*3*

*3*

*3*

*5*

*5*

114

*n*

*3*

*3*

*3*

*3*

*8va<sup>-</sup>*

*5*

*8va<sup>-</sup>*

*3*

*5*

*5*

116

ord.  
*mp* *f* 3  
*mf* 3  
8va- 5  
8va- 3 5

118

*sub mp* *f* *ppp*  
*mf* 3 3  
8va- 5  
5 *mp*  
15mb

120

*f* *mf* *pizz.* *n* *arco* *mp < f*

*fff* *f* *5:4* *5*

123

*fff* *mp* *n* *sub mp* *ff* *ppp* *f* *mp* *3* *5* *8va*

127 **M**

pizz. 3  
mf

pizz.  
mf

p  
3:2

3:2

129

3:2

3:2

5:4

3:2



131

arco  
*p*

arco  
*p*

5 3 3:2 5:4

133 **N**

*f* *p* *f* *p* *f*

*f* *p* *f* *p* *f*

3:2 5:4 3 5:4

8vb

138 **O**

ff

8<sup>va</sup>

3:2

3

3

3

3

3

8

141 **P**

8

8

fff

fff

fff

3:2

3

3

3

3

3

8

15<sup>mb</sup>

145 (8)

(15)

**Q**

(8)

149

(15)

(8)

153

The image shows a musical score for two systems. The first system consists of two staves, treble and bass. The second system also consists of two staves, treble and bass, with a grand staff bracket on the left. The score includes various musical notations such as triplets, quintuplets, and fingerings. The first system starts with a measure containing a triplet of eighth notes in the treble and a quarter note in the bass. The second system starts with a measure containing a triplet of eighth notes in the treble and a quarter note in the bass. The score ends with a double bar line.

[www.stevenlamphear.com](http://www.stevenlamphear.com)

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