

# TENDON

(2019)

For string quartet

Dedicated to JACK

# ten·don

noun

a flexible but inelastic cord of strong fibrous collagen tissue attaching a muscle to a bone.

This piece can be preformed independently or as an introduction to my previous work for string quartet - "Marionetta" (2018). In both cases, I explore possible connections between structural time and the small-scale rhythmic organization of phrases and gestures. In "Tendon", the basic compositional process began with recursive time devisions that were made in order to create a pre-determined organic rhythmic structure that seamlessly connects the smallest temporal events with the large form of the piece, with everything in the middle. The totality of rhythmic organicism also becomes a prison for musical expression, since it predetermines each of the gesture's length. The natural, expected longevity of sound is in a constant tension with the pre-determined rhythmic and structural organization of the piece. Sometimes the boundaries are marked by contrast, at other times simply by silences. The strings become the marionetta's tendons - they magically create independent, voluntary free movements within, and in several cases, breaks out of, the reality frame of their allotted time slots.

# TENDON

## EXPLANATIONS

This work can be performed as a stand-alone piece, or as an introduction to my previous string quartet - *Marionette* (2018).

### Abbreviations:

fl. = Flautando

mST = Molto sul tasto.

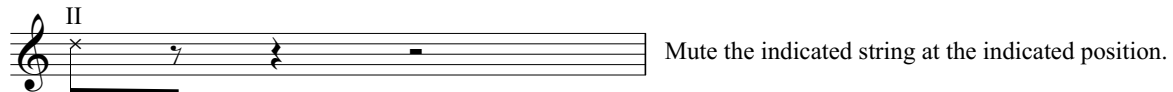
mSP = Molto sul ponticello.

non vib. = No vibrato.

molto vib. (grot.) = Grotesque, wide, and rapid vibrato.

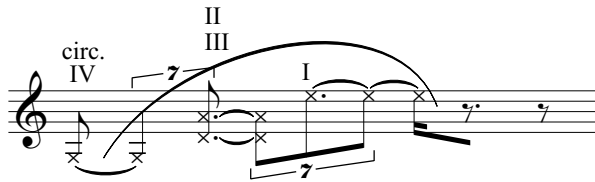
circ. = Circular bowing.

batt. salt. = Battuto saltando.

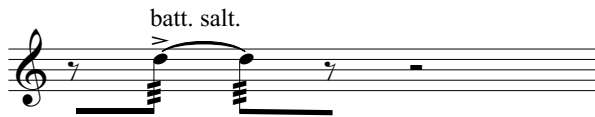




Vertical bowing.  
Scratch the string while moving towards the bridge.



Circular bowing.  
Move the bow in the direction of the slur.  
When the slur is rising - the direction of the bow should be towards the bridge.  
When circular bowing is applied, all four strings should be muted at the lowest position possible.



Battuto saltando.  
Hit the string with the bow, and allow very rapid bounces of the bow for the indicated duration.



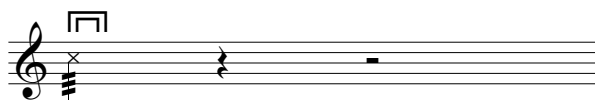
Use the tip of the bow as contact point with the string.



Very rapid, back and forth vertical scratches of the indicated muted string.



Col legno battuto glisses.  
The ascending pitch is produced by moving the bow towards the bridge.  
Allow the bounce to naturally fade away.



While pressure is applied to the muted string, with a stiff arm shake the bow to create small rapid scratches.

# TENDON

♩=60

The musical score is for the piece "Tendon" and is written for Violin, Viola, and Violoncello. The tempo is marked as ♩=60. The score is divided into three measures. The first measure contains the initial musical notation, while the second and third measures are empty staves with a bar line at the end of each.

**Violin:** The first measure begins with a *pizz.* (pizzicato) instruction and a dynamic marking of *mf*. The melody consists of a quarter note followed by a dotted quarter note, with a *pp* dynamic marking under a slur. The second and third measures are empty.

**Violoncello:** The first measure begins with a dynamic marking of *mp*. The melody consists of a quarter note followed by a dotted quarter note, with a *p* dynamic marking under a slur. A *5* (fingering) is indicated under the second note. The second measure continues with a *pp* dynamic marking and a *7* (fingering) under a slur. The third measure is empty.

**Violoncello Performance Instruction:** An *mST* (musical staff) instruction is shown with an arrow pointing to the right, indicating a shift in the staff position. A bracket labeled *7* is placed above the final note of the first measure.

**Viola:** The first measure begins with a *pizz.* instruction and a dynamic marking of *mp*. The melody consists of a quarter note followed by a dotted quarter note, with a *p* dynamic marking under a slur. The second measure continues with a *pppp* dynamic marking and a *7* (fingering) under a slur. The third measure is empty.

2 4

Vln. I arco fl. 3 *p* fl. 5 *pp* 7

Vln. II arco II pizz. *ppp* 3 *mp* *pp*

Vla. arco fl. 3 *p* pizz. 5 *mp* 7 *pp*

Vc. pizz. 5 *pp* arco 5 *mp*

6

Vln. non vib. 8<sup>va</sup> *pppp*

Vln. pizz. *pp* *ppp*

Vla. nail pizz. 3 *pp*

Vc. pizz. gliss. 3 *pp*

8

Vln. *ppp* 3 n

Vln.

Vla.

Vc.

10

Vln. pizz. 7 *p* 3 *pp*

Vln. arco fl. 7 *p* pizz. 3 *pp*

Vla. pizz. 7 *p* 3 *pp*

Vc. arco mST 3 *p* *pp* *p*

4 12

Vln. *pizz.* *pp*

Vln. *pizz.* *f* *pp*

Vla. *arco* *mf*

Vc. *III circ.* *mf* *pppp* *ppp* *7* *I II* *n*

14

Vln. *p* *3*

Vln. *arco circ. IV* *pppp* *7* *II III* *I* *ppp* *n* *fl.* *ppp*

Vla. *circ. IV* *ppp* *7* *3* *II III* *I* *pp*

Vc. *pizz.* *p*



16

Vln. *f* pizz. tip *p* pizz. *mp* arco fl. *p* pizz.

Vln. *p* pizz. *f* 3 *p* *mp* arco III *ppp* *p*

Vla. *pp* *mf* mST 5 pizz. *mp* 3 *p*

Vc. *pp* *mf* arco mST III pizz. + arco fl. 5 nail pizz. *p* arco II *ppp*

18

Vln. *p* 3 *ppp* *p* tip *pp* *mp*

Vln. *ppp* arco mST *p* *ppp* *p* batt. salt. *ppp*

Vla. *p* arco III pizz. *mf* *p* arco batt. salt. *ppp*

Vc. pizz. 3 *pp* pizz. *mf* *p* nail *ppp*

6 20

Vln. arco tip tip tip non vib. <sup>8va</sup>

*p* *ppp* *mf* *ppp*

Vln. arco 3 *mf* pizz. *f*

Vla. pizz. *pp* arco 3 *mf* pizz. 3 *pp* *ppp* arco II *p* *ppp* *f*

Vc. nail *p* 3 *mf* III 5 3 *p* *ppp* arco II 5 *p* *pp* *f* pizz. +

22

Vln. *pp* *n* pizz. *ppp*

Vln. *p* 3 *pp* *mf* *p* *ppp*

Vla. pizz. 5 *p* *ppp* 3 arco *mp* *p* *mf*

Vc. 7 3 *p* *ppp* 3 *mp* arco *p* *mf*

24

Vln. *pizz.* *ppp*

Vln. *pizz.* *ppp*

Vla. *pppp*

Vc. *pizz.* *ppp*

II arco

5

26

Vln. *pp* *f* *pp* *mp* *ff* *pp*

Vln. arco *mp* *pp* *ppp* *f* *pp* *mp* *ff* *pp* *mp*

Vla. *pp* *n* *f* *pp* *mp* *ff* *pp* *mp*

Vc. arco *mp* *pp* *ppp* *f* *mp* *pp* *ff* *pp* *mp* *ff*

*mST* *5* *5* *3* *3* *3* *5*

*arco* *mST* *3* *5*

*arco* *mST* *7* *5*

*arco* *mST* *3* *3*

*molto vib. (grot.)*

*ord.* *5*

*pizz.*

8 28

Vln. *ff* *pizz.* *batt. salt.* *f* *ff* *f* *ff* *mp* *p*

Vln. *ff* *pizz.* *f* *ff* *mp*

Vla. *ff* *pizz.* *batt. salt.* *arco* *ff* *mp*

Vc. *fff* *ff* *f* *arco* *ff* *mp* *p*

30

Vln. *pp* *ff* *f* *pizz.* *p*

Vln. *p* *ff* *mf*

Vla. *p* *ff* *f* *mf*

Vc. *mp* *p* *fff* *ff* *p* *mf*

32

Vln. *arco* *ff* *pizz.* *mp* *mf* *mp* *mf* *ff* 9

Vln. *arco* *ff* *pizz.* *mp* *mf* *mp* *ff* *pizz.* *f*

Vla. *pizz.* *ff* *mp* *arco* *mf* *mp* *ff* *f* *mf*

Vc. *pizz.* *ff* *mp* *ff*

34

Vln. *pizz.* *mp* *f* *arco* *mST* *gliss.* *gliss.* *ff* *p* *pizz.* *mp* *pp*

Vln. *mp* *f* *mf* *ff* *p* *ff*

Vla. *arco* *mp* *pizz.* *mf* *p* *pp*

Vc. *mp* *p* *ff* *arco* *batt. salt.*

10  
Vln. *pizz.* *ff* *mf* *p* *ff* *mp* *nail II* *arco* *f* *ff* *p* *mf*

Vln. *mST IV* *pp* *mp* *p* *ord.* *f* *ff* *pizz.* *f*

Vla. *pizz.* *ff* *mf* *arco* *mp* *pizz.* *f*

Vc. *pizz.* *mp* *gliss.* *arco* *ff* *pizz.* *mf*

38  
Vln. *pizz.* *pp* *mf* *mp* *arco* *batt. salt.* *f* *p* *mp* *batt. salt.* *ff* *p*

Vln. *mp* *f* *mp* *arco* *f* *mp* *arco* *ff* *mp*

Vla. *pizz.* *mp* *f* *ff* *f* *ff* *mf* *mp* *mf*

Vc. *ff* *mf* *f* *ff* *gliss.* *mp*

40

arco  
batt. salt.

Vln. *f* *mp* *ff* *mp* *f* *p* *mp* *mf* *mp* *5*

Vln. *f* *mp* *ff* *ord.* *mp* *f* *p* *mp* *mf* *mp* *5*

Vla. *pizz.* *ff* *mf* *gliss.* *f* *ff* *5* *3* *7*

Vc. *pizz.* *ff* *mf* *f* *mp* *f* *ff* *5* *3* *5* *3*

11

42

Vln. *f* *mp* *ff* *batt. salt.* *mf* *pp* *mp* *f* *ff* *p* *mp* *f* *mp* *p*

Vln. *f* *mp* *ff* *batt. salt.* *mf* *pp* *mp* *f* *ff* *p* *mp* *f* *mp* *p*

Vla. *pizz.* *5* *3* *5* *5* *pizz.* *3* *5* *5*

Vc. *gliss.* *7* *5* *5* *pizz.* *7* *gliss.* *f* *mp* *p*

44

Vln. I arco mST *ff* *mf mp* *ff* *mp* *ff* *mf > p* *f* *> mp* *f* *mf*

Vln. II arco mST *ff* *mf > p* *ff* *mp* *f* *mf > p* *f* *> mp* *f* *mf*

Vla. pizz. *p* *mf* *f* *ff* *mp* *ff* *8va* *fff*

Vc. pizz. *mf* *f* *ff* *p* *mf* *ff* *mp* *ff* *fff*



46

Vln. *f mp ff* *f mf f mf > mp* *arco ff mf > mp ff pp ppp* *mSP* *8va*

Vln. *f mp ff f mp f mf > mp* *arco ff mf f ff pp ppp* *mSP*

Vla. *ff mp* *ff* *pizz. p ppp*

Vc. *ff mp* *ff* *pizz. p ppp*

14 48 ⑧

Vln. *ff* *mp* *pp* *mf* *pp* *p* *ppp* *pp* *pppp* *fff* *mSP*

Vln. *ff* *mp* *pp* *mf* *pp* *p* *ppp* *pp* *pppp* *fff* *mSP*

Vla. *pizz.* *mf* *ppp* *fff* *mSP* arco molto vib. (grot.)

Vc. *mf* *ppp* *fff* *mSP* arco molto vib. (grot.)

50

Vln. *p* *ffff* *p* *fff* *gliss.*

Vln. *p* *ffff* *p* *fff* *gliss.*

Vla. *III* *IV* *mSP* *molto vib. (grot.)* *gliss.* *gliss.*

Vc. *III* *IV* *mSP* *molto vib. (grot.)* *gliss.* *gliss.*

52

Vln. *gliss.* *ffff* 15

Vln. *gliss.* *ffff*

Vla. *gliss.* *gliss.* *gliss.* *fff*

Vc. *gliss.* *gliss.* *gliss.* *fff*

54

Vln. *fff* *ffff* *pp*

Vln. *fff* *ffff* *ppp* mST

Vla. *gliss.* *gliss.* *ffff* *pp*

Vc. *gliss.* *gliss.* *ffff* *pp*

16 56

Vln. *p* *n* circ. IV *pp* II III

Vln. *pp* vib. ord. 3 *n*

Vla. 5 *n* 5 *ppp*

Vc. ord bow 7 *n* *pp* *n*

58 I II III IV

Vln. I II III IV (to mSP) *ppp* gliss. 5

Vln. 3 *pp* *n* 5 *ppp*

Vla. 3 *pp* *ppp* IV 5 pizz. *pp*

Vc. 3 I 5 clb *ppp* *pp* *n* *ppp*

60

Vln. *pp*

Vln. *n* *pp* <sup>3</sup> *n*

Vla. ST (to mSP) arco *n* *pp*

Vc. *gliss.* *n* *ppp* *pp* *n*

62

Vln. *n* *pp* *n* *pp* *n*

Vln. *ppp* *n* *pp* *n*

Vla. *n* *ppp* *pp* *n* *ppp* *n*

Vc. *p* *n* *mSP* *n* *pp*

18 64

Vln. *pp*

Vln. *ppp* *n* *pp* *n* *gliss.*

Vla. *ppp* *pp* *pizz.* *arco* *ppp* *pp* *n*

Vc. *pp* *n* *gliss.* *arco* *n*

66

Vln. *pppp*

Vln. *p*

Vla. *n* *p* *n*

Vc. *p* *n* *n*

68 19

Vln. *pp*

Vln. *n* *gliss.* *5* *pp* *n* *pp*

Vla. *ppp* *5* *pp* *n* *II* *3* *ppp* *pp* *n*

Vc. *p* *n* *ppp*

70

Vln. *n* *7* *pp* *n*

Vln. *n* *7* *pp* *n*

Vla. *pp* *n* *gliss.* *clb II* *arco* *n* *7* *pp*

Vc. *pizz.* *+* *pp* *arco* *5* *ppp* *pp*

20 72

Vln. *pp* *p*

Vln. *pp n* *ppp* *n*

Vla. *ppp* *pp* *n* *pp* *clb*

Vc. *n* *ppp* *pp* *n* *ppp* *pizz.* *p*

*arco* *II*

74

Vln. *pp* *n* *pp* *n*

Vln. *pp* *n*

Vla. *gliss.* *pp* *n* *ppp* *pp* *n*

Vc. *ppp* *pp* *ppp* *pp* *n*

*gliss.* *clb* *gliss.* *arco* *II*



76

Vln. *pp*

Vln. *pp n*

Vla. *p* *ppp* *pp* *n* *pp* *n* *ppp*

Vc. *p* *ppp* *pp* *n* *ppp* *pp*

clb *gliss.*

arco

pizz.

78

Vln. *p*

Vln. *pp* *ppp* *pp* *n* *pp* *n* *pp* *n*

Vla. *pp* *ppp* *pp* *n* *pp* *n* *pp* *n*

Vc. *ppp* *pp* *n* *ppp* *pp* *n* *ppp* *pp*

clb *gliss.*

arco

pizz.

22 80

Vln. *p* *pp*

Vln. *ppp* *n* *pp*

Vla. arco *ppp* *pp* *n* *pp* *n* *pp* *n* *pp* *n*

Vc. *ppp* *p* *n* *ppp* *pp*

7 3 5 5

3

arco

clb gliss.

arco I batt. salt. gliss.

IV

pizz. 5 arco

82

Vln. *mp* *pp*

Vln. *pp* *pp* *n*

Vla. clb *mp* *n* *pp* *n* *p* *n* *mp* *n* *pp* *ppp*

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

7 3

8<sup>va</sup>

5

clb gliss.

arco batt. salt.

clb II gliss.

clb gliss.

arco I batt. salt.

pizz. arco III pizz. arco I pizz. arco pizz.

84

Vln. *mp* *pp* *mp* *pp*

Vln. *p* *ppp* *p*

Vla. *ppp* *p* *ppp* *p* *ppp* *p* *ppp*

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

clb *gliss.* *arco batt. salt. gliss.* *batt. salt. gliss.*

pizz. *arco* *pizz.*

7 5 3

23

86

Vln. *mp* *pp* *mf* *p*

Vln. *mf* *pp* *p* *ppp* *n* *p*

Vla. *p* *ppp* *p* *ppp* *p* *ppp* *pp* *pp*

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

III IV *gliss.* *batt. salt.* *gliss.* *n* *p*

mSP 5 6 *clb gliss.* *clb gliss.* *arco batt. salt. gliss.* *batt. salt. gliss.*

5 3 3 3

24 88

Vln. *mp* *pp* *pp* *pp*

Vln. *mf* *pp* *mp* *pp*

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

Vc. *ppp* *pp* *ppp* *ff* *pp*

batt. salt *gliss.*

arco

III IV *gliss.* *gliss.*

n *mf*

*pp* *mSP* 6 *pp* *mp* *pp*

*pizz.* *ff* *arco* *pp*

90

Vln. *mf* *p* *mp* *pp*

Vln. *mp* *pp* *mp* *pp*

Vla. *pp* *p* *n* *pp* *mp* *ppp*

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

*gliss.* *gliss.* *gliss.* *gliss.*

*mST*

Very slow bow movement

92

Vln. *gliss. gliss.* *gliss. gliss.* *gliss.25 gliss.*

*ppp* *p* *ppp* *mf* *ppp*

Vln. *mp* *ppp* *mf*

Vla. *mp* *ppp* *mp* *ppp*

Vc. ord. speed *gliss.* (to mSP) *gliss.*

*ppp*

94

Vln. *gliss. gliss.* *ppp* *mp* *ppp* *mf*

Vln. *ppp* *mf* *p*

Vla. *mf* *ppp* *mf*

Vc. *gliss.* *gliss.*

26 96

Vln. *gliss. gliss.* *gliss. gliss.* *pp* *p* *pp* *mf* *p*

Vln. *mf* *ppp* *pp* *ppp*

Vla. *p* *mf* *p* *mf*

Vc. *mp* *gliss.* (to mST) *gliss.*

→ mSP

98

Vln. *mf* *p* *mf* *p* *ppp* *gliss.*

Vln. *mf* *p* *mf*

Vla. *p* *mf*

Vc. *gliss.* *gliss.*

mSP

100

Vln. *gliss.* *pp* *gliss.* 27

Vln. *ppp*

Vla. *ppp* *n* *ppp* *nail pizz.*

Vc. *ppp* *gliss.* *mST (until the end)*

102

Vln. *gliss.* *gliss.* *mST (until the end)* *ppp* 7

Vln. *n* *ppp* *nail pizz.*

Vla. *ppp* *n* *ppp* *nail pizz.*

Vc. *pp* *ppp*

28

104

Vln.

*pp* *ppp* *pp* *pppp*

Vln.

*ppp*

Vla.

*ppp*

Vc.

*pp* *ppp* *pp* *ppp* *pp*

106

Vln.

*ppp*

Vln.

*ppp*

Vla.

*ppp*

Vc.

*pppp* *ppp*



108

Vln. *ppp* *n*

Vln. *ppp* *n*

Vla. *ppp* *n*

Vc. *n*

Detailed description: This system contains measures 108 and 109. Measure 108 features a long, sweeping slur over the first violin staff, which contains a whole note chord. The second violin staff has a triplet of eighth notes, followed by a quarter note, and another triplet of eighth notes. The viola staff has a triplet of eighth notes, followed by a quarter note. The third violin staff has a long slur over the first two measures, with a triplet of eighth notes in the second measure. Measure 109 shows the first violin staff with a whole note chord. The second violin staff has a quarter note, followed by a quarter rest, and another quarter note. The viola staff has a quarter note, followed by a quarter rest, and another quarter note. The third violin staff has a long slur over the first two measures, with a triplet of eighth notes in the second measure.

110

Vln.

Vln. *n*

Vla.

Vc.

Detailed description: This system contains measure 110. The first violin staff is empty. The second violin staff has a triplet of eighth notes, followed by a quarter note. The viola staff is empty. The third violin staff is empty.