

Rotation Study
for string quartet

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for the Ciompi Quartet

Rotation Study for string quartet

program note:

As we embrace new ways of working following the COVID-19 pandemic, we can take this moment to adjust our artistic practice and understanding of how music can relate with time. With my *Rotation Study* I create a proportional notation system where each system lasts 15 seconds – the four quartet members form a kind of kaleidoscopic pattern each system, slowly shifting their notes in each line. –JB

performance notes:

A **stop watch** or the provided **click track** can be used to keep your timing through the piece. The click track marks each second with three possible sounds: 1. for the start of each system, 2. for each tick mark representing seconds, and 3. for the two dashed lines in the middle of each system. The click track uses the pitches A and G, depending on the corresponding material in an effort to aid with intonation.

The **dynamics** across the piece are generally quiet, with nothing exceeding **mf**.

Any **open strings** are indicated by the string number above the note.

The **tremolos** should increase and decrease their speed in conjunction with the dynamic changes – as you play louder, your trem increases. Along with the increase in trem rate, you should apply extra pressure, getting to over pressure (O.P.), with a scratchy sound that still allows for some pitch to emerge.

Ricochet is represented by four dots above the note. Throw your bow to your instrument for the approximate time indicated, gradually increasing the speed as you decrescendo to nothing. If there's a line pointing downwards from the note, that indicates a concurrent glissando downwards. There's not a goal pitch in mind, you should start with the indicated pitch, then indiscriminately gliss downwards from there at a moderate speed.

Because of its indeterminate nature, this piece can be performed through video conferencing software with each player performing in different locations, live in a traditional concert setting, or outdoors with each player distanced spatially, following our social distancing guidelines (or even further spaced apart).

If making an audio recording, the cello can serve as a **reference track** – Carrie can record her part first, then send the track to the remaining members of the quartet who can record to both her line and the click track (I can assist in putting together a track that has both Carrie and the click if we go this route).

Vln. 1 (pizz) I. II. 25" II. 30" I. III. 35"
mp
 Vln. 2 *p*
 Vla. *p*
 Vc. *p* O.P. ord *mp* *p*

Vln. 1 I., arco 40" 45" I. 50"
p
 Vln. 2 *p*
 Vla. pizz *mp*
 Vc. *p* O.P. ord *mp* *p*

Vln. 1 pizz III. 55" III. 1'00" I. III. 1'05"
mp
 Vln. 2 I., pizz II. II. I. III.
mp
 Vla. (pizz) III. III. III.
mp
 Vc. II., pizz *mp*

1'10" 1'15" 1'20"

Violin 1: arco, II. *p* → O.P. → ord *mp* > *p* → O.P. → ord *mp* > *p*

Violin 2: (pizz) *mp*

Viola: arco *p*

Violoncello: arco *p*

1'25" 1'30" 1'35"

Violin 1: pizz *mp* arco *p* → O.P. → ord

Violin 2: arco *p* → O.P. → ord *mp* > *p*

Viola: pizz *mp*

Violoncello: arco *p* → O.P. → ord *mp* > *p*

1'40" 1'45" 1'50"

Violin 1: arco *p* → O.P. → ord *mp* > *p*

Violin 2: pizz *mp* II. *p*

Viola: arco *p* III.

Violoncello: arco *p*

*** four dots indicate **Ricochet (ric)**; throw the bow for the approx time indicated, gradually increasing speed as you decresc; lines pointing downward indicate a gliss happening while you ricochet; should be heard in the overall texture at first (mf dynamic) then fade to nothing

1'55" **2'00"** **2'05"**
 Vln. 1: *** II. *mf* > (sim.) III. *mf* > I. (ric, no gliss) *mf* >
 Vln. 2: (pizz) *mp*
 Vla.: pizz IV. *mp*
 Vc.: pizz *mp* III. III. I. II.

2'10" **2'15"** **2'20"**
 Vln. 1: pizz *mp*
 Vln. 2: arco *** II. *mf* > II. (sim., with gliss, no harm.) *mf* > (ord) *p*
 Vla.: arco O.P. ord III. III. *p*
 Vc.: arco *p* I. *mp* *p*

2'25" 2'30" 2'35"

Vln. 1: II., arco; mf > p mp p; O.P. ord

Vln. 2: II.; mf > p

Vla.: IV. (•); p mf > mf > mf >

Vc.: I.; p

2'40" 2'45" 2'50"

Vln. 1: IV. (•); mf > mf > mf >

Vln. 2: mf > mf > mf >

Vla.: mf > mf >

Vc.: (quasi vc solo); p I. III.

2'55" 3'00" 3'05"

Vln. 1: II.; p mf >

Vln. 2: p

Vla.: pizz I.

Vc.: mp

3'55" 4'00" 4'05"

Vln. 1 pizz *mp*

Vln. 2 pizz *mp* II.

Vla. *p* < *mp* > *p* O.P. → ord

Vc. pizz *mp* arco *p*

Detailed description: This system covers measures from 3'55" to 4'05". It features four staves: Violin 1, Violin 2, Viola, and Violoncello. Violin 1 starts with a pizzicato (*mp*) chord. Violin 2 has a pizzicato (*mp*) chord and a second ending (II.) later. Viola has a dynamic contour from *p* to *mp* to *p*, with 'O.P.' and 'ord' markings. Violoncello starts with a pizzicato (*mp*) chord, then switches to arco (*p*).

4'10" 4'15" 4'20"

Vln. 1 arco *p*

Vln. 2 arco *p*

Vla. pizz II. IV., arco *mp* *mf* > pizz II. *mp*

Vc. *p*

Detailed description: This system covers measures from 4'10" to 4'20". Violin 1 and Violin 2 play arco (*p*). Viola has a dynamic contour from *mf* to *mp* to *mf* with accents, and includes markings for pizzicato (II.), IV. arco (*mp*), and pizzicato (II.) (*mp*). Violoncello starts with a dynamic contour from *p* to *mp* to *p*.

4'25" 4'30" 4'35"

Vln. 1 *mf* > pizz *mp* III.

Vln. 2 arco *p* *mf* > *mf* >

Vla. *p* *mf* >

Vc. II. pizz II. IV. I. *mp* < *p*

Detailed description: This system covers measures from 4'25" to 4'35". Violin 1 has a dynamic contour from *mf* to *mp* with an accent, and includes markings for pizzicato (*mp*) and III. Violin 2 has a dynamic contour from *p* to *mf* with accents, and includes markings for pizzicato (II.), IV., and I. Viola has a dynamic contour from *p* to *mf* with an accent. Violoncello has a dynamic contour from *p* to *mp* to *p* with markings for II., pizzicato, II., IV., and I.