**ABSTRACT** 

Title of Dissertation: CONSTRICT-DEPART, STRING QUARTET

NO. 1

Bradley S. Green, Doctor of Musical Arts, 2017

Dissertation directed by: Professor Thomas DeLio, School of Music

Constrict-Depart is a piece for string quartet in two movements that lasts approximately fourteen minutes. The title refers to an overarching sonic theme within and across both movements that consists of the constriction and subsequent expansion of a vacillating pitch band. In addition, the form of each movement is defined by the constriction and expansion of the string registers.

The title also refers to a constant push and pull between a self-imposed binary categorization of sonic materials. The binary categories of sound being explored are defined as noise (aperiodic sounds) and pitch (periodic sounds). In this context, noise is classified best as a sound or collection of sounds that offer no perceivable pitch, or a cluster of pitches (either within the same register or multiple registers) so dense that individual pitches become imperceptible. By contrast, pitched sounds would be classified as sounds in which there is a definite and perceptible frequency, or group of frequencies. In the piece, these categories of sound are set as two extremes on a spectrum, with noise on one end and pitch on the other, and are juxtaposed as

extremes, and also as collections of sounds that fall between the two extremes of the spectrum.

The piece is composed with the use of time frames, and the graphic notation was created specifically to allow for a greater degree of performance freedom than is generally possible with standard notation, while still maintaining a fixed formal structure that keeps the order of sound events the same from performance to performance. Each performer is to read from the full score, and the performers are instructed to realize their parts independently of the ensemble and to not attempt to coordinate attacks based on the visual relationship between their part and another part in the score (except where indicated). This independence allows for the music to occur naturally as a result of intermingling individual realizations, as opposed to general coordination.

### CONSTRICT-DEPART, STRING QUARTET NO. 1

by

Bradley S. Green

Dissertation submitted to the Faculty of the Graduate School of the University of Maryland, College Park, in partial fulfillment of the requirements for the degree of Doctor of Musical Arts

2017

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# Constrict-Depart

String Quartet No. 1

by Bradley S. Green

#### **General Performance Notes**

**Proportional Notation** – The time frames in *Constrict-Depart* are strict in that they should last only as long as the notated time indicates (usually 30 seconds), but the individual performers should fill the time frames with the material independent of the ensemble. This means that, aside from some specific events, the performers need not attempt to artificially align the parts, but instead concentrate solely on filling the proportions of the time frames with their own material. The only exceptions to this are the following: **1)** When there is a **large hollow arrow** above the staff, which means that **all** of the performers should **begin** the sound event together, **2)** When two or more events are connected by a **double-sided hollow arrow**, which means to begin these sound events together, **3)** When two events are connected by a **single-sided hollow arrow**, meaning the 2<sup>nd</sup> event should occur *immediately* after the 1<sup>st</sup> event, or **4)** When a **sequence of numbers** precedes each sound event, which means the performers should enter in a specific order according to proportion. Lastly, whenever **two dashed barlines** frame a blank area of the staff, this means that there needs to be a definite and proportional silence in the blank area, which may require some level of coordination depending on how short or long the silence lasts.

To give an example:



In the above excerpt from movement II, the time frame lasts 30 seconds (all time frames in movement II are 30 seconds in length, which is why it is not specifically notated above). The hash marks above the staff indicate 10 second increments. From left to right, each performer will fill the proportions of the time frame without regard for the other parts with only 3 exceptions: 1) There should be a silence roughly between 3'05" and 3'10" as indicated by the dashed barlines, 2) At roughly 3'16", a dashed hollow arrow connects three events, which means that the violin I event should begin directly after the viola event, and the violin II event should begin directly after the violin I event (in other words, each event should trigger the next event), and 3) At roughly 3'23", The double-sided hollow arrow Indicates that each of the events in the violin I, violin II, and cello should begin together, though they should continue independently.

**Dynamics** – In some cases, the dynamics are not meant to literally translate into a specific "volume of sound" (e.g. forte is objectively loud, piano is objectively soft, etc.), but are for the performer to know the amount of energy to put into an attack or passage. To give an example, in the 4'31" time frame of movement I, it may not be "possible" to perform the *jeté* at fortissimo dynamic since it is a fairly quiet technique, but the performer should attempt to perform the technique very loudly in order for the passage to be aurally effective.

**Accidentals** – Accidentals should only affect the note it is directly beside and should not be carried over to any other pitch. Naturals and courtesy accidentals are used only in cases of extreme proximity.

Page Turns – Because of the need for each performer to read from the score, there needs to be special attention given to page turns. Ultimately, it is up to the performer to decide how best to tackle the page turns, but here are a few options: 1) Print the score only on one side of the pages, which will allow the performer cycle through the pages whenever a pause allows for a free hand (some pages may need to be taped together), 2) Paste the pages to a large sheet of cardboard to have all of the pages in view, 3) If available, read the score from a tablet or other device and use a foot pedal to facilitate page turns (this has been the most effective method for past performances).

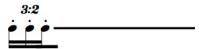
#### Secondary Staff in Movement II

#### YOU WILL NEED 2 EGG SHAKERS FOR MOVEMENT II.

Both movements of Constrict-Depart are performed in the way described previously and use mostly the same notations. The main difference in the 2<sup>nd</sup> movement is the use of a secondary staff underneath each instrument's primary staff. The secondary staff is for the following: 1) Percussive sounds made on the body of the instrument (the "x" notation), 2) Unvoiced (whispered) sounds made with the mouth on the given syllable, though, for space reasons, this notation may also appear on the main staff and is performed the same way (the square noteheads, usually for a white noise type effect), and 3) at the end of the piece, the percussive notation (open noteheads with "x's") indicates the use of egg shakers.

Only 2 egg shakers are required (used in the violin II and cello parts). The egg shakers should be grasped from the top and performed with a circular motion to achieve a continuous white noise type sound with as little pulse as possible, though there will probably be some noticeable pulse as it may not be possible to achieve a loud enough volume while also avoiding a pulse.

#### Lines, Arrows, and Brackets



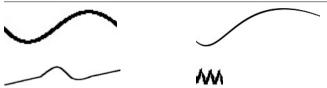
Continuance Lines - Lines that are attached to specific rhythms, patterns, or techniques are meant to be continuous until the line ends. An arrow means to continue the material into the next time frame. Specific rhythms (excluding whole notes) are always associated with 60 bpm.



Continuance lines attached to whole notes are sustained notes (these are **not** associated with 60 bpm).



Notes in parentheses that are attached to continuance lines (either whole notes or solid noteheads) indicate one of 2 things: 1) Reference points for pitches in a glissando (as shown above, if the parenthesis contains a solid notehead and is attached to a specific rhythmic pattern, do not change the pattern, only the pitch), or 2) A courtesy reminder of the material that continues from the previous time frame.



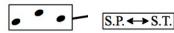
Depending on the shape, curved lines are either wide/irregular vibrato or irregular glissandi. In performance, the realizations of these lines are approximate, but the performers should stay within the general notated range. If these lines are not attached to a specific starting pitch, then begin the vibrato or glissando in the general notated area.



Two techniques attached by arrow means to transition slowly from one technique to the other.

SP - - - 1

A technique attached to a bracket means to continue the technique until the end of the bracket



A box that is attached to a continuance line means to continue the contents of the box until the line ends. In the case of a box appearing above the staff containing two techniques and a double-sided arrow, continuously transition between the two techniques until the end of the continuance line (the speed of the transition depends on the length of the double-sided arrow, short for quick transitions, long for slow transitions). In some cases, the box is attached to a diagonal line, which means to raise or lower the register of the contents of the box proportionally in the specified direction. In both cases, the contents of the box only give an approximate representation of what should be performed, and it is ultimately up to the performer to determine how to realize the notation.

#### **Symbols and Acronyms**

SP	Sul Ponticello
MSP	Molto Sul Ponticello
ST	Sul Tasto
MST	Molto Sul Tasto
CLB	Col Legno Battuto
CLT	Col Legno Tratto
OP	Over Pressure. If the amount of pressure is not specified, it should be enough pressure to create a very grinding sound that almost completely obscures the pitch (if possible).

For the sake of visual clarity, dark wedges indicate a slow transition to or from over pressure. The thick end indicates the greatest amount of pressure, and the thin end indicates light or normal pressure.

Abbreviation for pizzicato. pz.



When a diagonal line cuts through the stems and beam of a group of notes, it means to perform the beamed material as fast as possible.

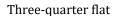


Quarter sharp



Three-quarter sharp







Instances of staccatissimo should be exaggerated in extreme contrast to staccato. If staccato is a light and detached attack with resonance, staccatissimo should be a very short and sharp attack with as little resonance as possible.



With fingernail



Highest possible pitch or pitches. Solid noteheads are single attacks, while open noteheads are sustained notes.



Vertical box - Slap strings on an unspecified area of the fingerboard. When attached to two lines (as in the given example), the performer should immediately perform a glissando on all strings in the specified direction. Sometimes there are specific fingerings inside the box, which means to finger those pitches during the slap.



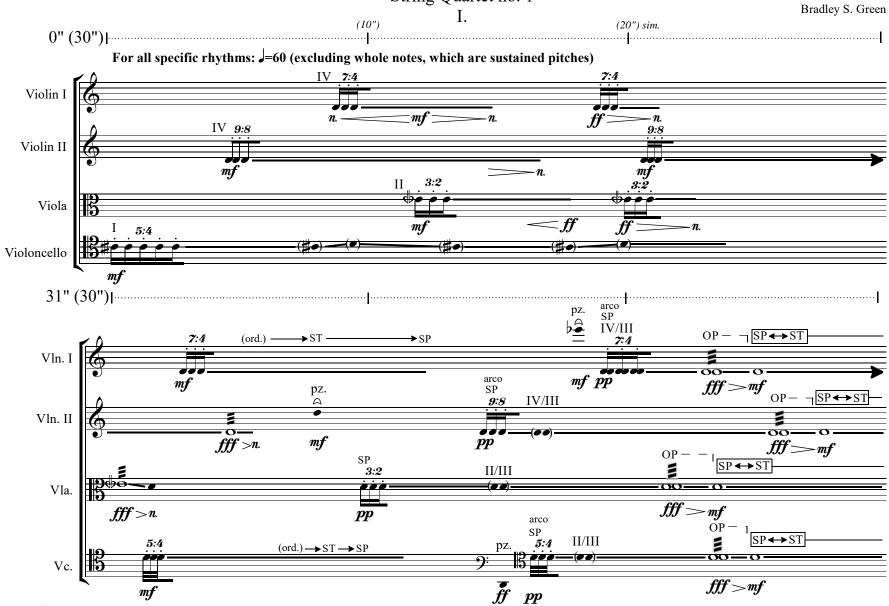
Play below the bridge

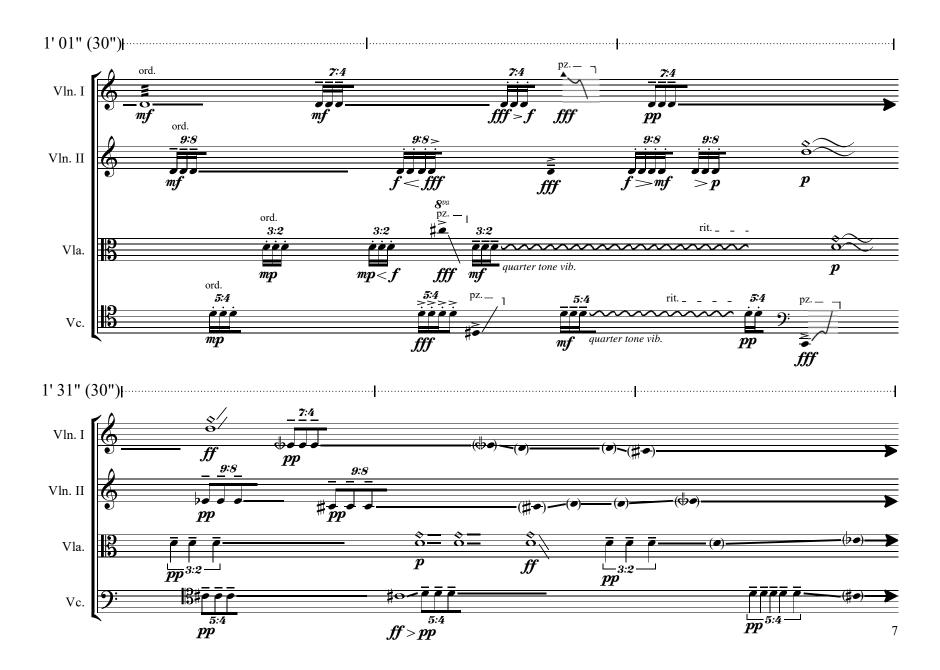


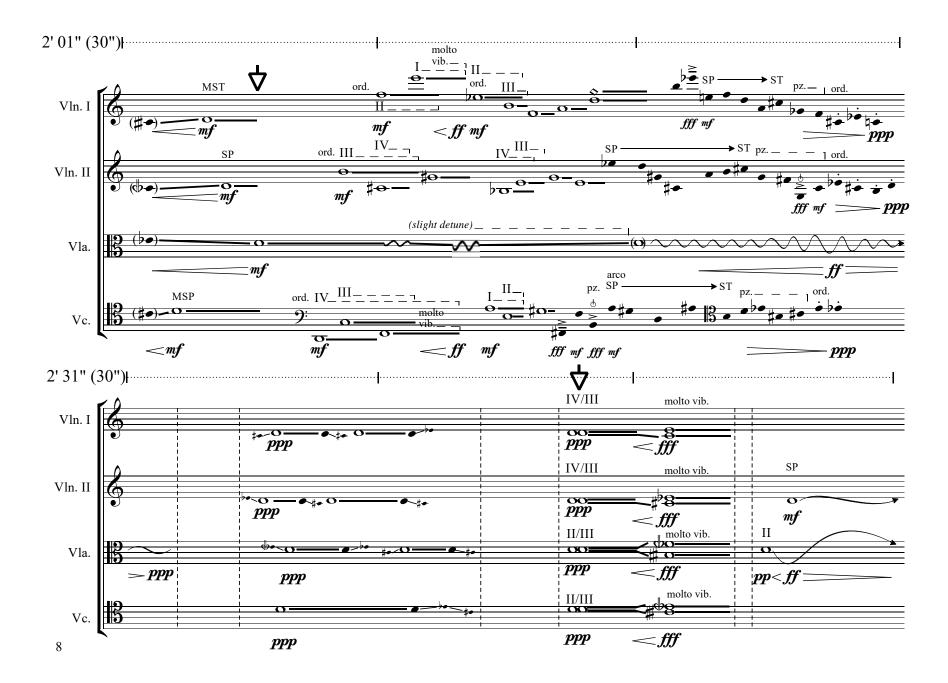
Play on tailpiece

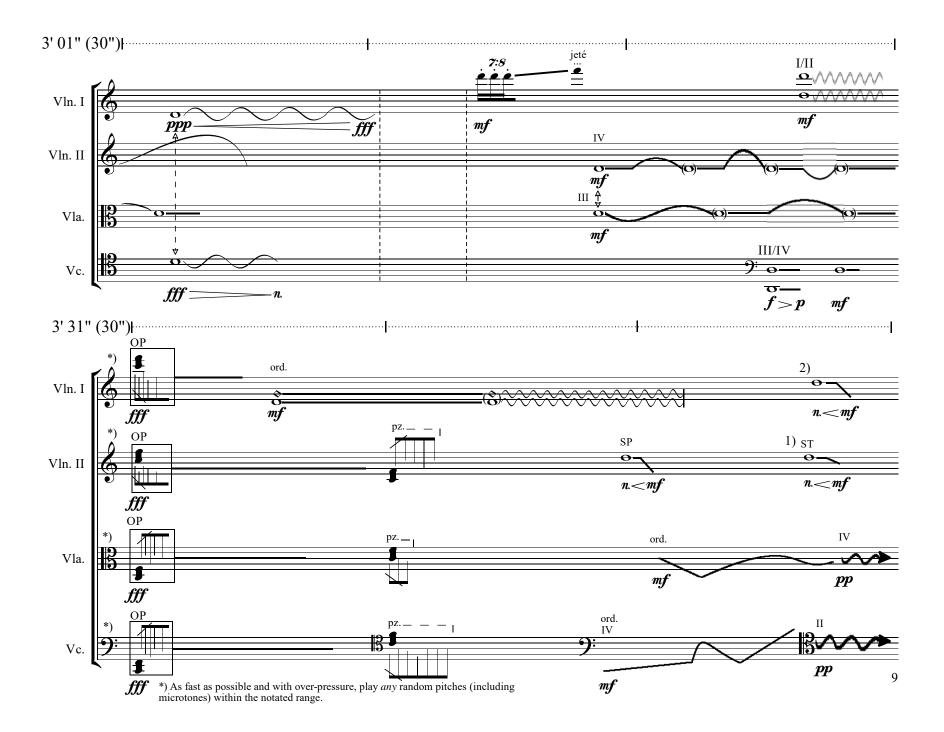
## Constrict-Depart

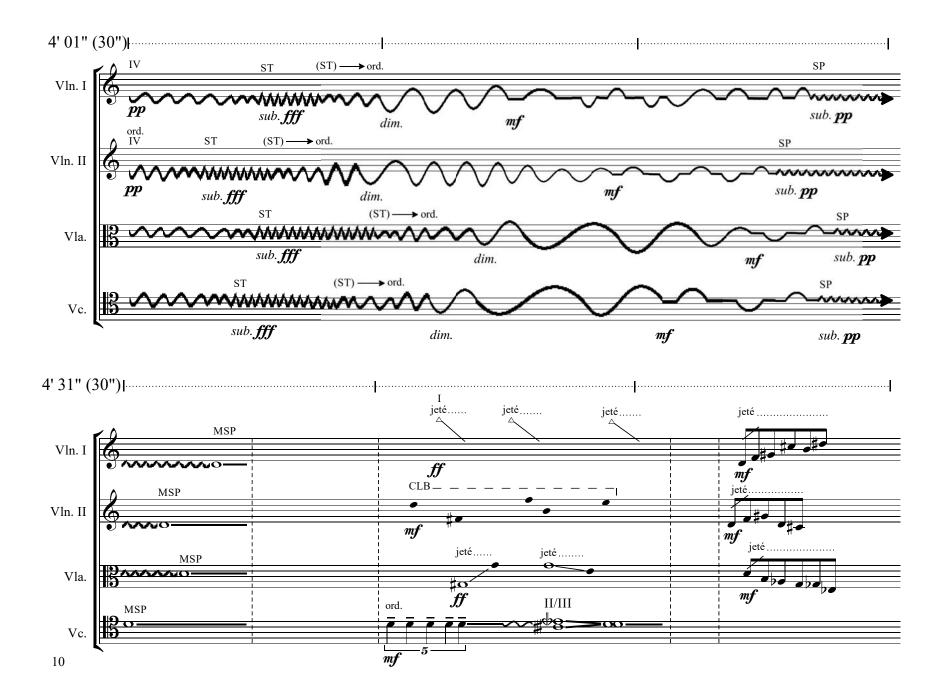
String Quartet no. 1

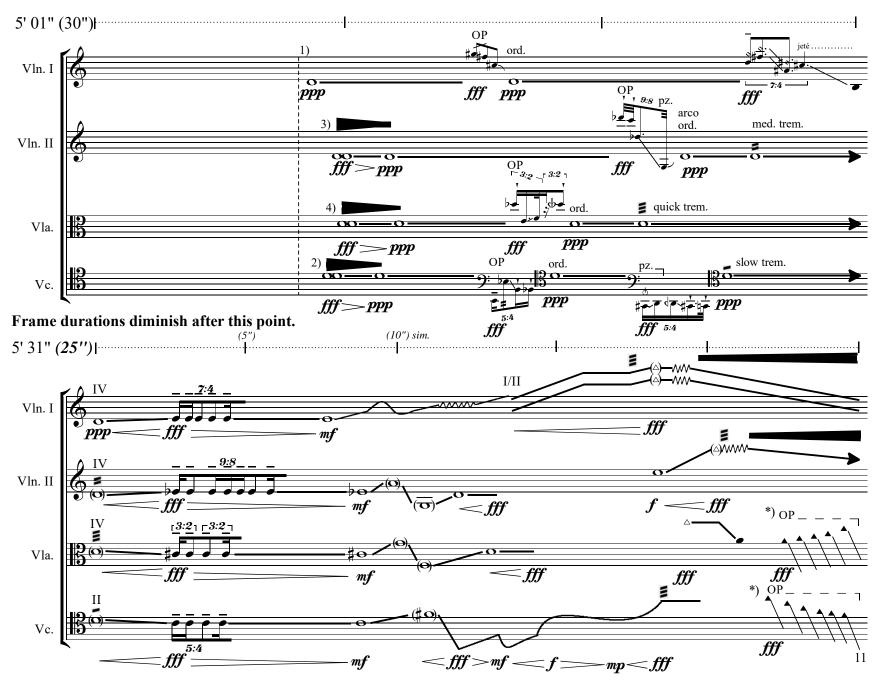




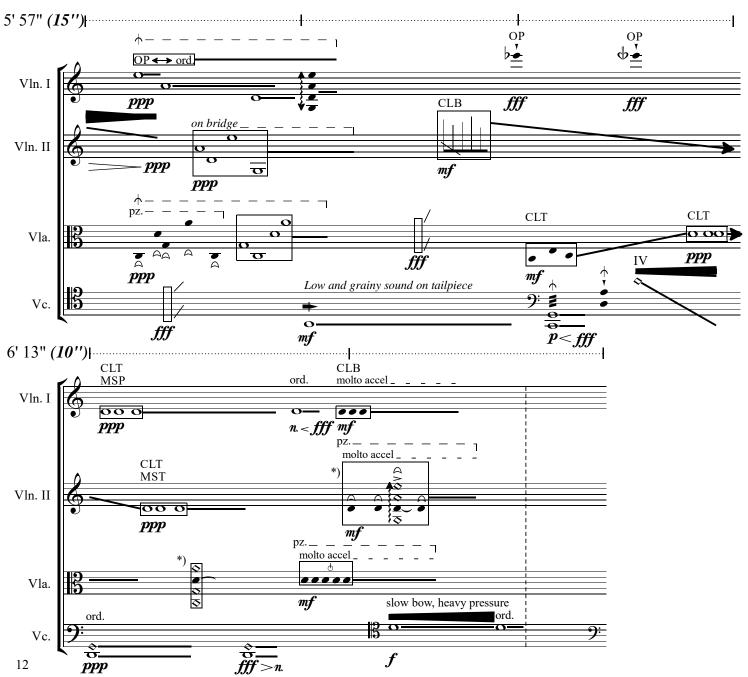




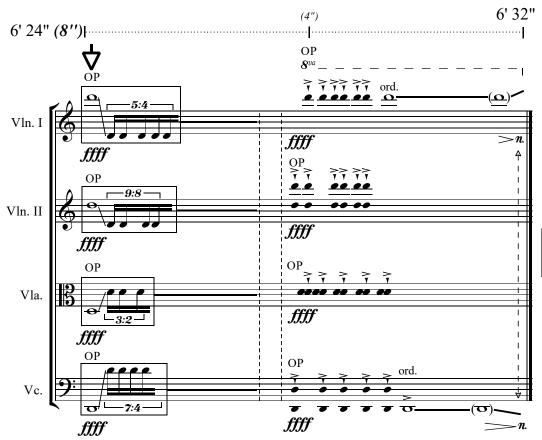




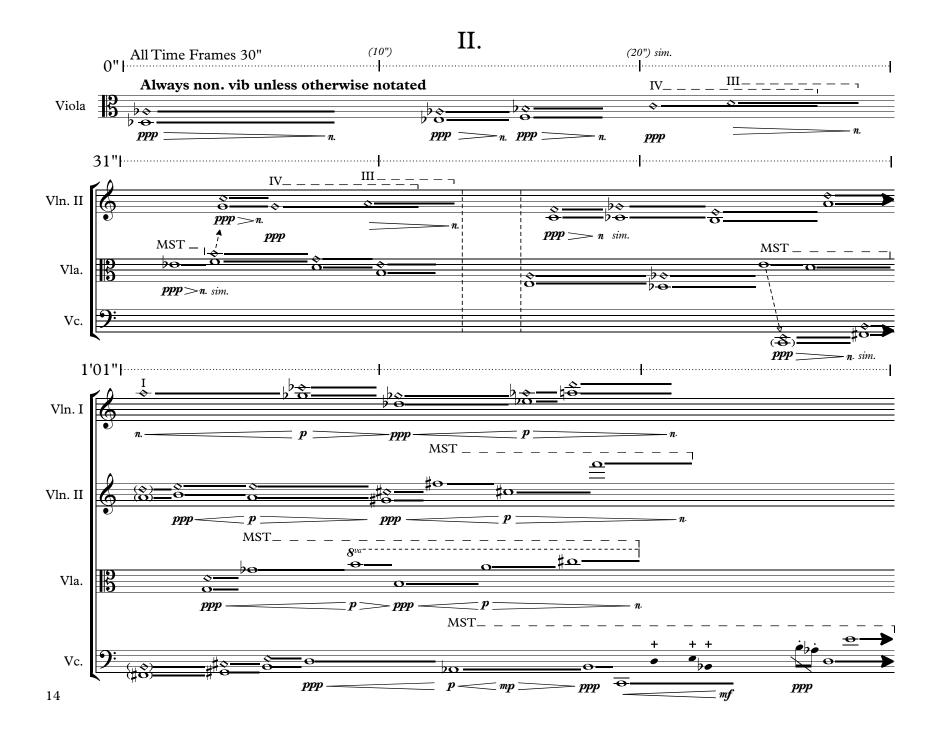
\*) Quick glissandi from unspecified highest pitches w/ over pressure.

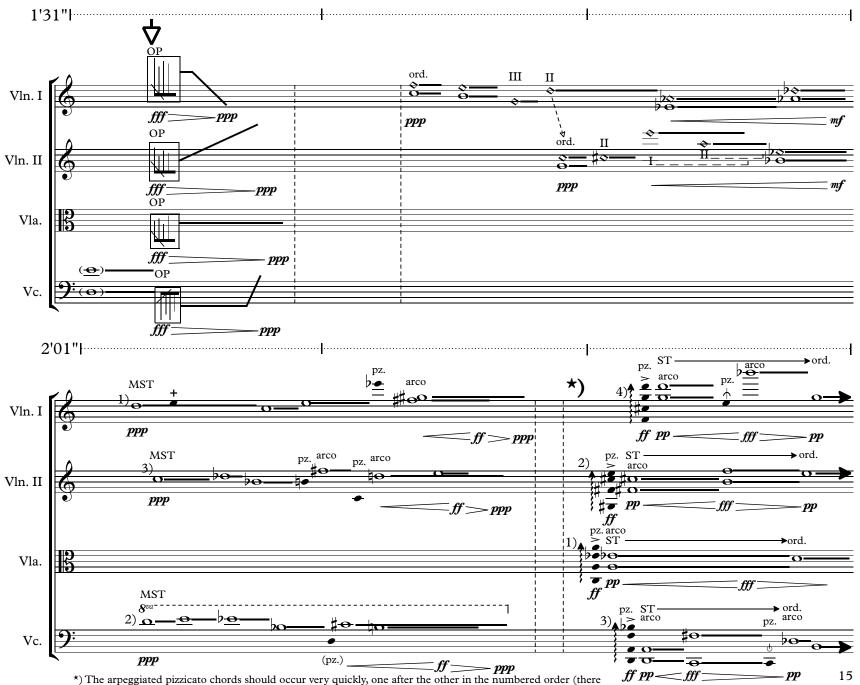


\*) Dampen strings notated with the diamond notehead (any area of the fingerboard), let ring the standard notehead.

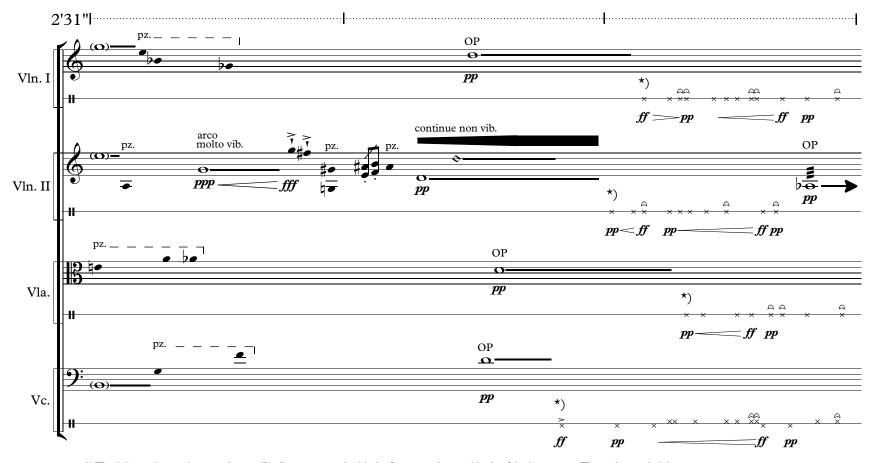


Reset timers for movement II as quietly as possible. Leave roughly 15"-20" of time between movements I and II.



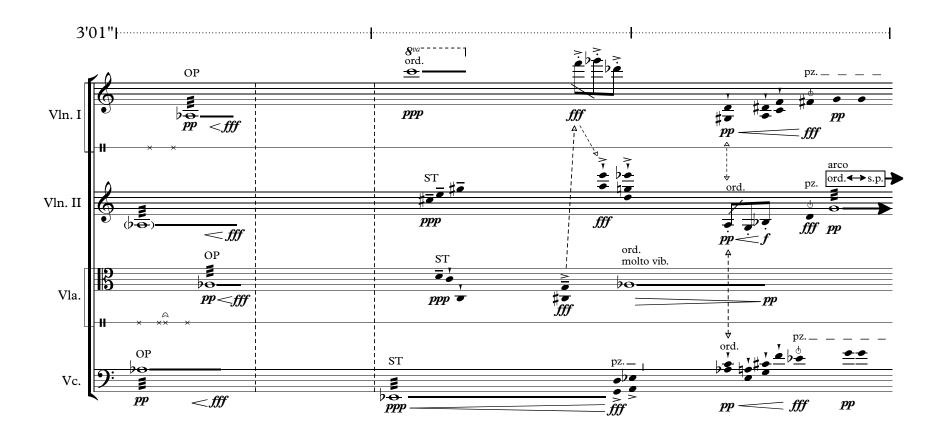


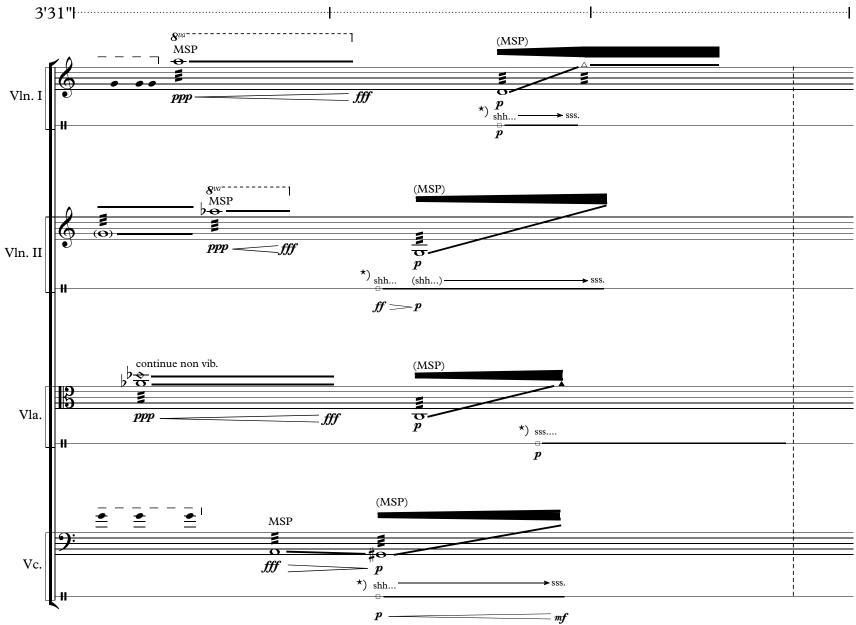
should be overlap between parts). To do this, each performer should start his or her chord immediately after the previous chord in the sequence starts. Each performer should then continue to the bowed chord immediately after their arpeggiated chord.



\*) The "x" notation on the secondary staff indicates an attack with the fingers on the wood body of the instrument. The wedge symbol that appears above the "x" notation means to attack with the fingernail.

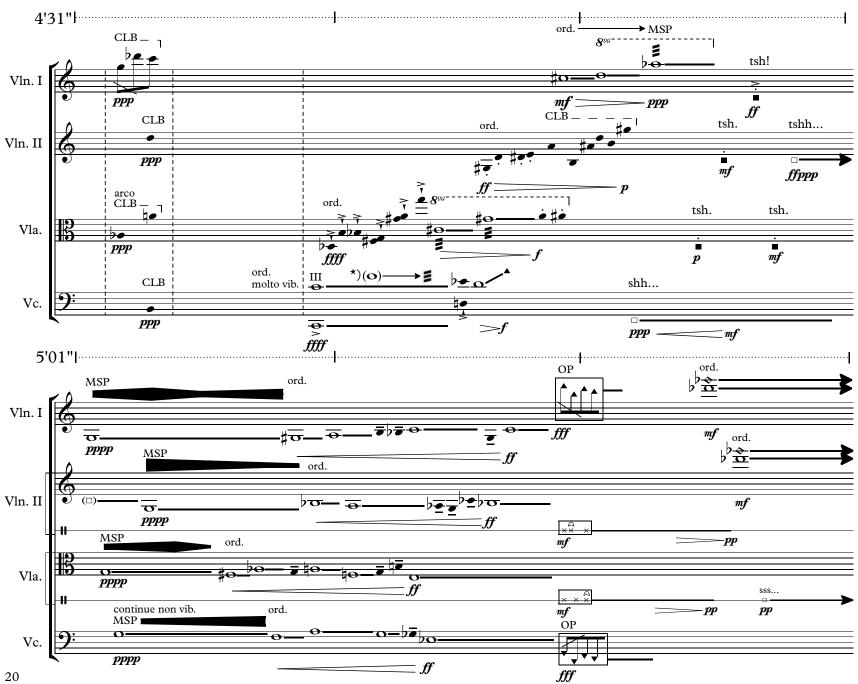
**Cello Only**: In addition to the above information, if the "x" notation appears below the line on the secondary staff, this indicates an attack with the palm, while the notation above the line indicates an attack with the tips of the fingers.



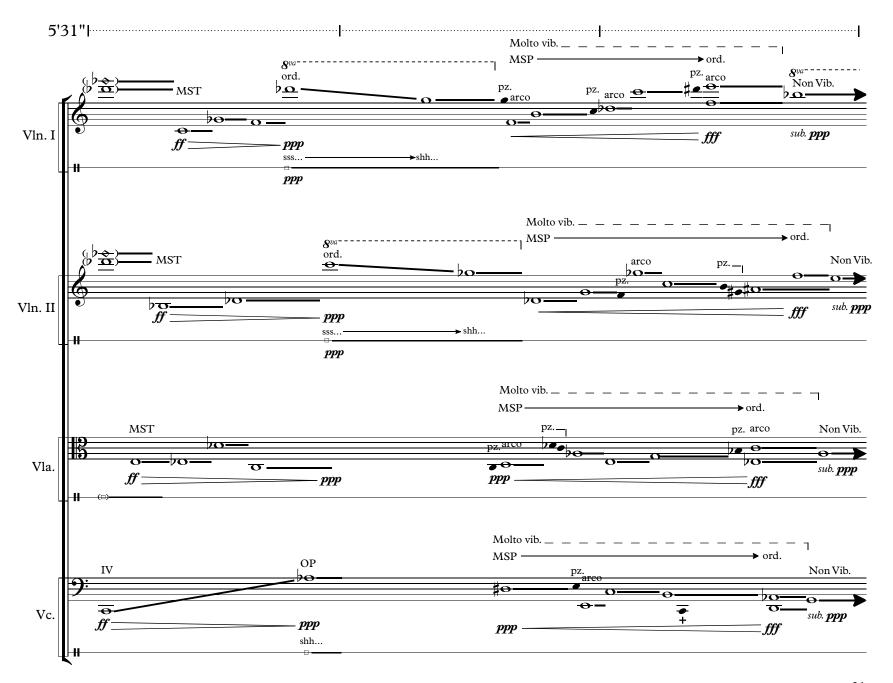


\*) The square notation below the staff indicates a spoken (but unvoiced/whispered) sound on the given syllable to produce white noise.



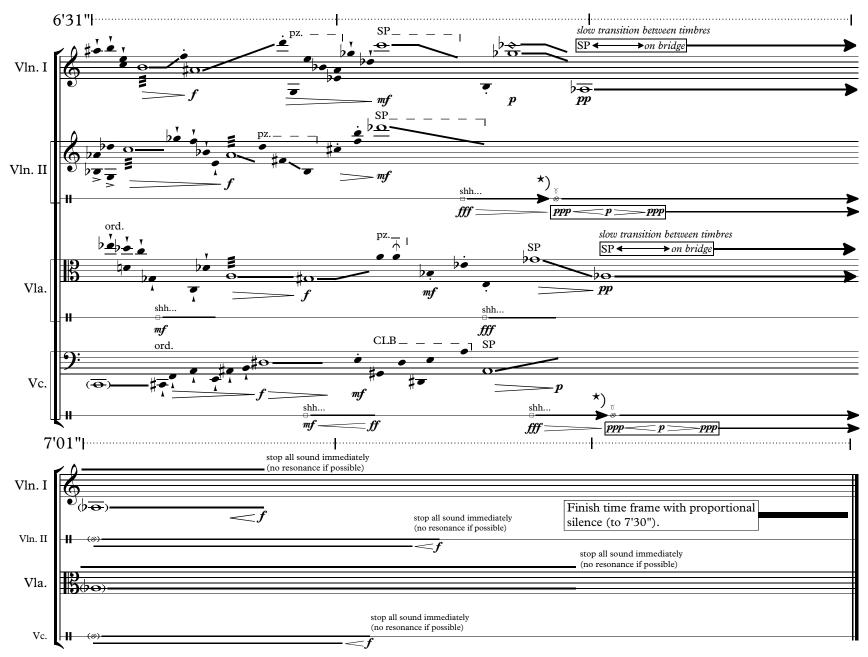


\*) Begin a slow tremolo (do not stop the sound) that gradually evolves into the notated unmeasured tremolo.





\*) For this time frame only, the dynamics notated underneath the main staff applies to both the main staff and the secondary staff.



\*) With an egg shaker, perform a slow circular motion (do not shake) with the goal of creating a continuous white noise with as little pulse as possible. Continue the whispered "shh..." as well, though when breath is needed, decrescendo to *niente* and then enter again with a crescendo from *niente*. Both the egg shaker and the whisper should slowly and smoothly crescendo and decrescendo together as notated.