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William Davy Cole

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September 2014 – February 2015

Duration: c.a. 23 minutes

for three violoncellos

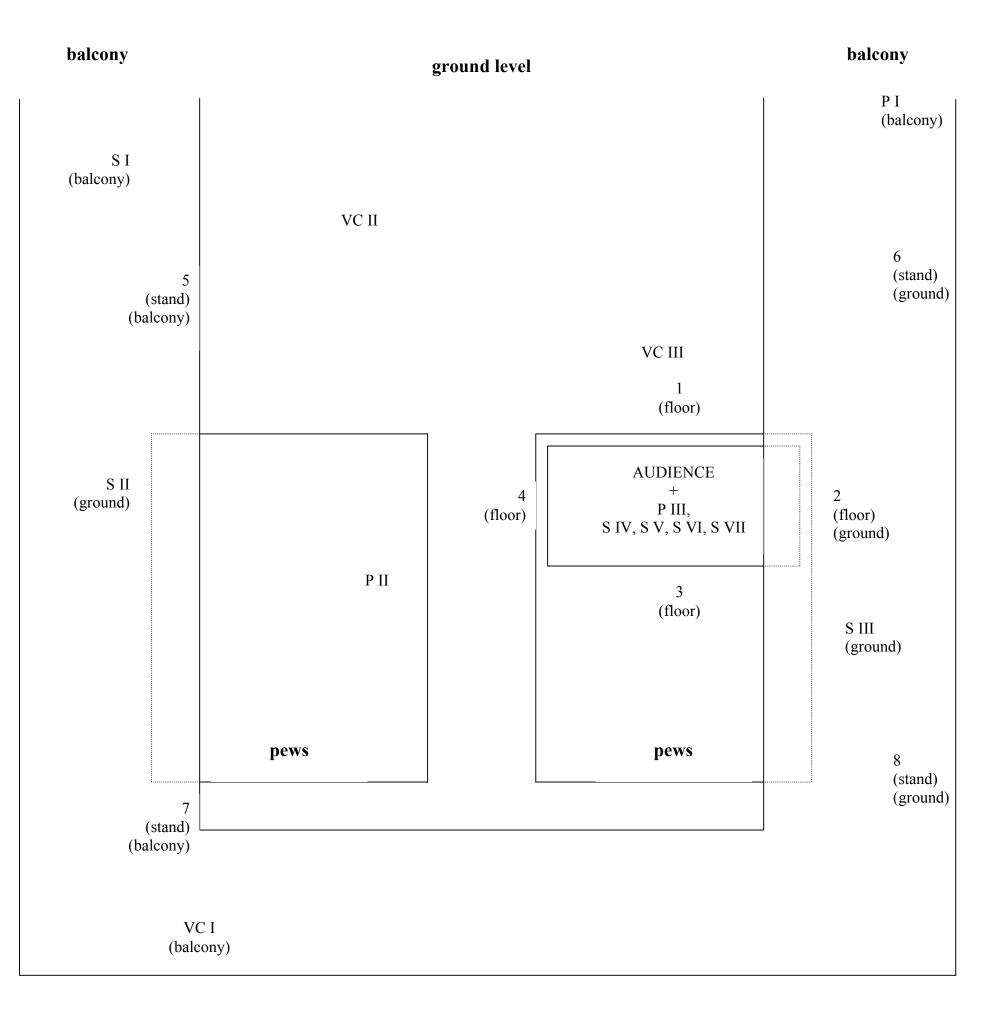
seven female vocalists

three percussionists (each with two large hand-held rocks and singing bowl)

and eight loudspeakers

 $k \alpha I b \sigma \vartheta$ must be performed in a large, long indoor space. The work was conceived for performance in Shoreditch Church (St. Leonard's), London on Saturday 18th April 2015. The diagram below refers to how the performers and loudspeakers are positioned within Shoreditch Church; if $k \alpha I b \sigma \vartheta$ is performed in another venue, these positions must be replicated as closely as possible.

The audience are seated in the front six or seven pews (this may be extended or reduced depending on audience numbers). Singers IV, V, VI and VII, and percussionist III are positioned randomly amongst them and are unamplified throughout. Speakers 1, 2, 3 and 4 are placed on the floor, immediately surrounding the audience (as closely as possible); speakers 5, 6, 7, 8 also surround the audience, but are elevated on stands – in Shoreditch Church 5 and 7 are positioned on the balcony and 6 and 8 are positioned on ground level – and are set back at a greater distance. The three 'cellos and singers I, II and III have unidirectional hyper-cardiod microphones positioned in front of them and on occasion their sounds are amplified and projected through the loudspeakers. These performers, as well as percussionists I and II, have specific individual positions around the church which are detailed in the diagram below. 'Cello I, singer I and percussionist I are positioned on the balcony and the other performers are positioned on ground level.



Notes on performance

For all performers

Feel:

The overall feel of $k\alpha I'b\sigma =$ must be hard, raw, earthy and primal. The sounds are all physical, primitive and simple, without adornment or embellishment - there must be absolutely no vibrato on any sound unless precisely indicated.

Space-time notation:

Space-time notation is used and execution of the piece requires that all performers use stopwatches.

To begin the piece, all performers must have their stopwatches to hand and ready to start. One of the performers, preferably one that all others are able to see clearly (such as VC III), counts the whole ensemble in (THREE... TWO... ONE... START! or something that effect). If any of the performers miss the cue, or their stopwatches fail to start for whatever reason, they should alert the ensemble and this initiation process should be restarted.

Continuous time is written out at the top of each system in intervals of 5 seconds:



Vertical lines mark the passing of every 5 seconds and divide each system into five 5-second 'bars'. The vertical lines are solely for the purpose of providing reference points for performers and should not influence how any sound might be approached (for example, no special emphasis should be placed on sounds that are positioned on a vertical line).

Performers should interpret the temporal position of sound events based on their spatial position within the 5-second bars.

For the majority of the piece, performers interpret their material fairly autonomously, though there are a few instances where synchronisation occurs. These points of synchronisation are indicated by a vertical dotted line with arrows above each of the sounds that are to be synchronised.





Every moment of synchronisation in the piece features a precise percussion sound and, as such, at these points other performers should follow the percussionists.

Silence is represented by empty space.

If a sound is sustaining, rather than a single attack, the line extending from it indicates its duration:



For example, this half whistle/half breath sound (see singer notes below), beginning at 5.55 and ending at c.a. 6.04, lasts c.a. 9 seconds.

Lines:

Where the line is thick (with no arrow), the sound remains unchanged throughout its duration other than in the ways specifically indicated (for example, if there's a crescendo or decrescendo).



Where the line has an arrow pointing towards a subsequent sound, there should be a gradual transition from the first to the second sound. A short vertical line intersecting the (arrowed) line indicates when the transition should begin. Where there isn't a short vertical line, the transition should begin from the moment that the first sound starts.



Glissandi are indicated by a thin line that connects the starting to the finishing pitch. Glissandi should always be continuous and regular throughout their duration, unless other wise stated.



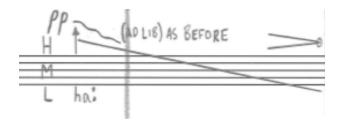
An LIB. indicates that performers should vary the glissando as they choose, i.e., slowing down and speeding up as if 'rubato', within the given duration and pitch range. All glissandi in the piece are descending and performers varying their glissandi ad libitum must only do so in a downward direction: pitch must never rise.

Clefs and Pitch:

Three clefs are used to indicate pitch: treble clef, bass clef, and high, middle and low clef:



The latter specifies register (high, middle and low) rather than precise pitches and is to be interpreted by performers as they see fit, for example here S II begins singing the highest she can and then 'glisses' down to any pitch in the low part of her register.



(Where this clef occurs in the 'cello parts, it refers to the high, middle and low registers of the string or strings specified, not the whole instrument)

Where there is no clef, or where a clef is crossed out with a diagonal line, all pitch is indeterminate:



↑ = highest pitch possible (where this indication occurs in the 'cello parts, it refers to highest pitch possible on the string specified, not the whole instrument).

Dynamics:

Two types of hairpin are used:

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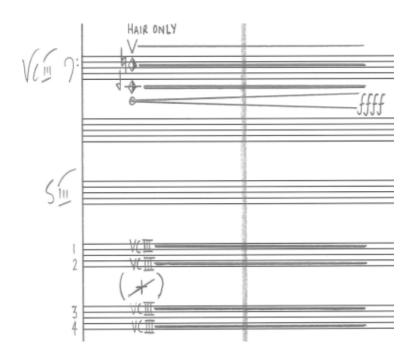
Conventional hairpins indicate a gradual, regular crescendo or decrescendo. Starting and finishing dynamics are always given. Where a conventional hairpin has a small circle around the joined end (al niente), this indicates that the sound should begin or end as imperceptibly as possible (from or to nothing):

This hairpin indicates a very sharp, rapid crescendo, that the sound should get exponentially louder throughout its duration. It should begin from nothing and end as loudly as possible.

Where the same dynamic is to be maintained over a number of successive sounds, the marking is given for the first sound, in brackets for the second sound and applies for all subsequent sounds until a new dynamic marking occurs.

Amplification:

Singers I, II and III and all three 'cellos are amplified on occasion. The purpose of the amplification is not (generally) to make the sounds louder, but rather to project the sounds in different parts of the church through the loudspeakers, or to surround the audience in a particular sounds. The score details which sounds are amplified through which loudspeakers:



For example, here this sound played by VC III is amplified through speakers 1, 2, 3 and 4. Performers should not adjust or modify their playing/singing in any way when they are being amplified.

For the violoncellists

Scordatura:

ALL MATERIAL IS PERFORMED ON THE TWO LOWEST STRINGS (III, IV), which are detuned as follows:



The C string (IV) is tuned down a minor 6^{th} to E and the G string (III) is tuned down a minor 3^{rd} and a quartertone.

Finger pressure:

Three degrees of finger pressure are indicated in the score:

1. Normal pressure (or open string) is indicated by a normal, full, round notehead:



2. Half way between normal pressure and harmonic pressure by a half white (or empty)/half black (or full), diamond notehead:



3. Very light, harmonic pressure by a white (empty), diamond notehead:



Bowing:

Bowings and bow changes are given above every sound. For each bowing, performers MUST USE THE FULL LENGTH OF THE BOW and, as such, the bowings indicate bow speed. The thin line that extends from the bowing marking indicates how long the (full) bowing should be. Where a sound is to be produced with a single bowing (no changes), the line will extend over its entire duration:



Bow changes that may occur within a single sound are written out above it and performers (as with all other events) interpret when these take place based on their location within the space-time notation. Such bow changes within a single sound are usually accented and, as in the example below, usually part of an accelerando towards tremolo:



As in the example above, arrows are used to indicate acceleration towards tremolo.

Tremolo:

As with all bowing in the piece, all tremolo must be performed with the FULL LENGTH OF THE BOW. It should be irregular, rough and physical.

Bow positions:

The following abbreviations are used to indicate bow positions:

S.P. = sul ponticello S.T. = sul tasto

P.S.P. = poco sul ponticello P.S.T. = poco sul tasto

M.S.P. = molto sul ponticello M.S.T. = molto sul tasto

S.R.S.T. indicates that performers should move ad libitum (rapidly) between sul ponticello and sul tasto. Any position within these two outer limits is permissible.

Bow pressure:

Bow pressure is normally relative to dynamics, but where extreme heavy pressure is required, this symbol is used above the sound:



This occurs between 6.50 and 7.30 over very short (staccatissimo), loud sounds, usually an open string or combination of open and stopped strings. The sound should be roaring, rasping and produce unpredictable high frequencies.

High, middle and low clef:

As mentioned above, all material is played on the two lowest strings, so when a high, middle and low clef appears, it refers to the high, middle and low registers of one or both of these two strings (not the whole instrument). The string or strings that the material is to be played on is indicated in the score: three of these indications occur:



= all material should be performed on the third string (III) and every sound is an artificial harmonic where the lighted touched (harmonic) pitch is perfect forth higher than the stopped pitch (producing a sound two octaves higher than the stopped pitch). Where the highest note possible is required (1), this sound be the highest artificial harmonic that the player can produce on the third string.



11 11

= all material should be performed on the third string (III), but not as an artificial harmonic, rather as a normal stopped pitch (normal pressure).

= all material should be performed on both the third and forth strings (III and IV) as a double stop barred at the same height on the fingerboard on both strings (as if playing a perfect fifth dyad in normal tuning). This will produce a dyad of an octave minus a quartertone.

Seed-pod bracelets:

At approximately 13.45, all 'cellists should put seed-pod bracelet shakers on their bowing wrist. These will produce a harsh, dry rattle as they're excited by the 'cellists' arm movements.

For the female vocalists

Breath sounds:

A large amount of the vocal material is constituted by a range of breath sounds. These fall into two categories:

1. Half whistle/half breath (or breathy whistle, or whistlely breath!), which is notated as follows:

Å.

Breath sound produced with a particular phoneme (written underneath), such as:

The phonemes used in the piece are written out in IPA spellings. All phonemes used are made up of the following:

x = back of the throat ch, as in (Scottish) loch, or Bach

u: = 00, as in z<u>oo</u>

h = h as in hat

a: = ar as in harp

a = **a** as in <u>a</u>t

so...

xu: = (back of the throat) choo; ha: = har; ha = ha

Breath sounds are almost always indeterminate in terms of pitch (whatever feels comfortable) and are usually notated on the middle line of the stave.

Occasionally breath sounds transition into pitched sounds, either sung or whistled, in which case they should be pitched the same as the destination pitch.

Sung sounds:

Almost all sung sounds are produced with the phoneme **ha**: (har), except on a few occasions when they are produced with the phoneme **a**: (ar).

All specified pitches (i.e., those that are not indeterminate or interpreted in a high, middle and low clef) are based around E4 or E5. The pitch material of the 'cellos is also entirely based around E, though several octaves lower. Singers should tune their pitches 'spectrally' to the 'cellos, as if drawing out the upper partials of their sounds.

Absolute 100% accuracy in terms of tuning is certainly not necessary, especially in the passages where pitches are microtonally inflected. If a pitch is notated to be a quartertone sharp or quartertone flat, this needn't be exact, it should just slightly raised or lowered.

Just to reiterate, there should be absolutely no vibrato or embellishment on any sung sound – all material should be primitive, basic and stark.

On pages 12 - 14, sung pitches are imitated and shared throughout the singers. Where the "AS S II" or "AS S VII" (for example) is written above an indeterminate pitch, this indicates that the same pitch that has just been sounded by S II or S VII should be sung.



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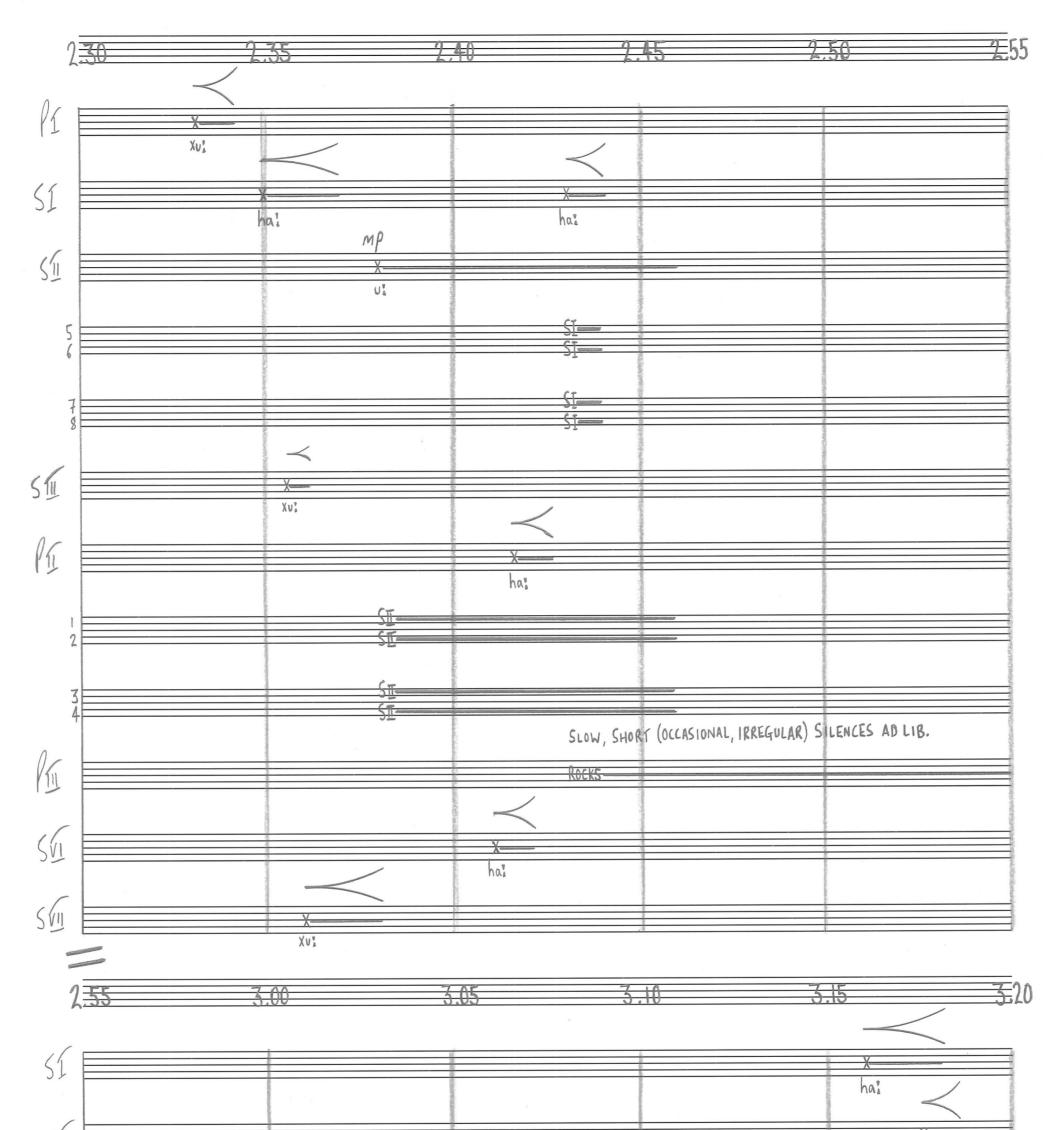


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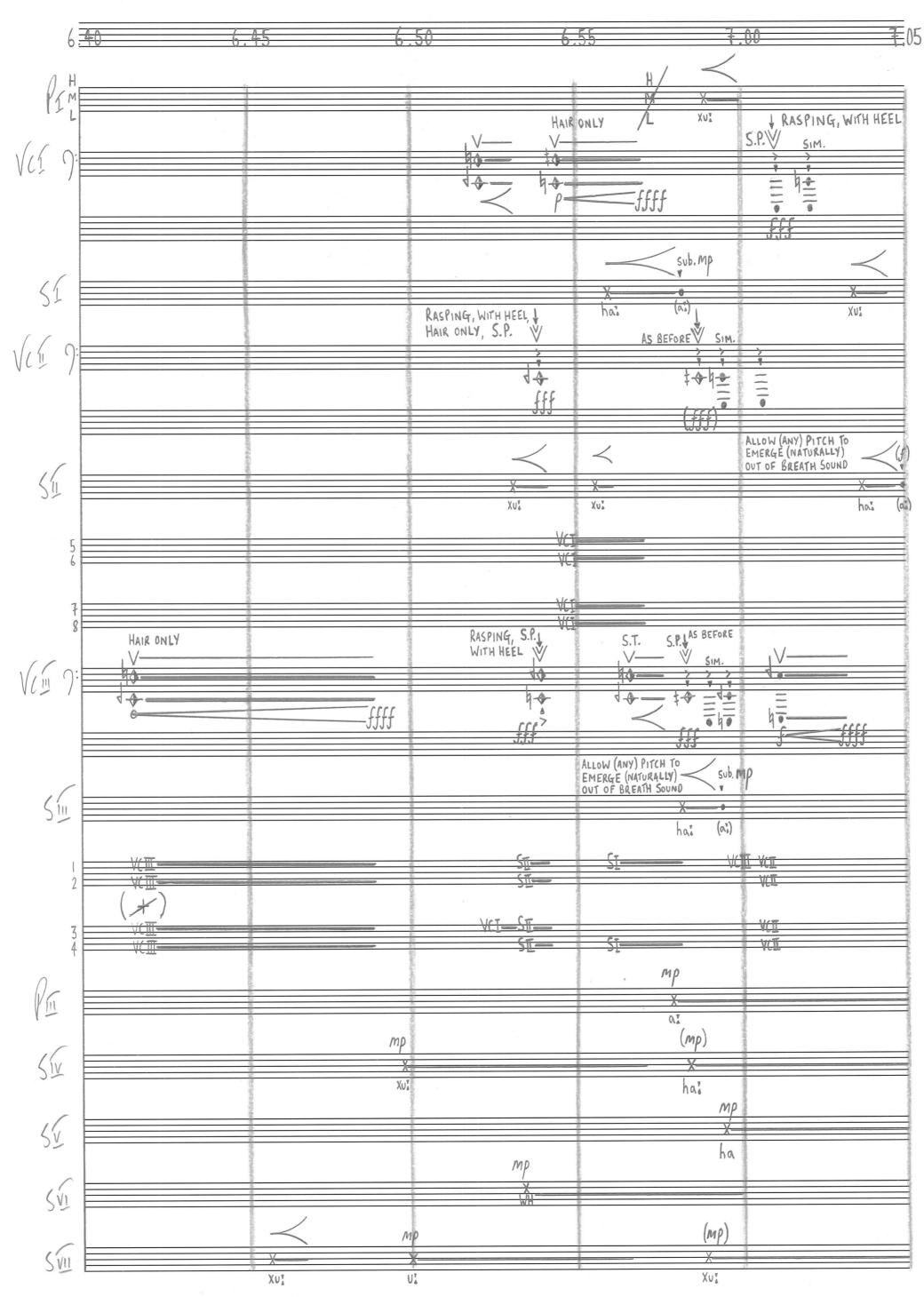
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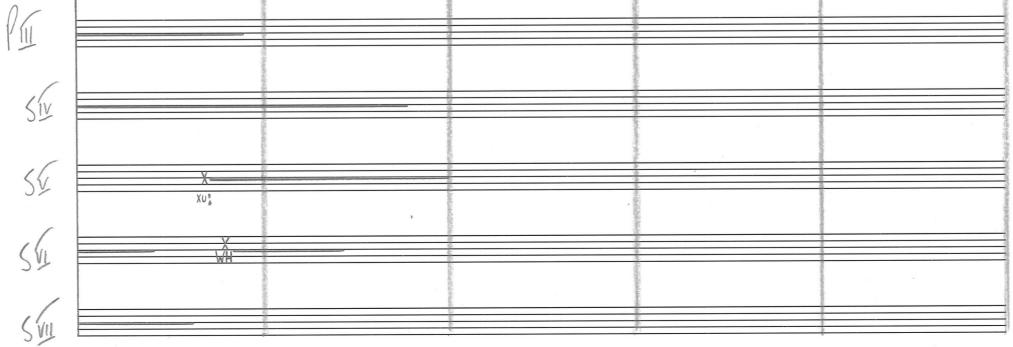


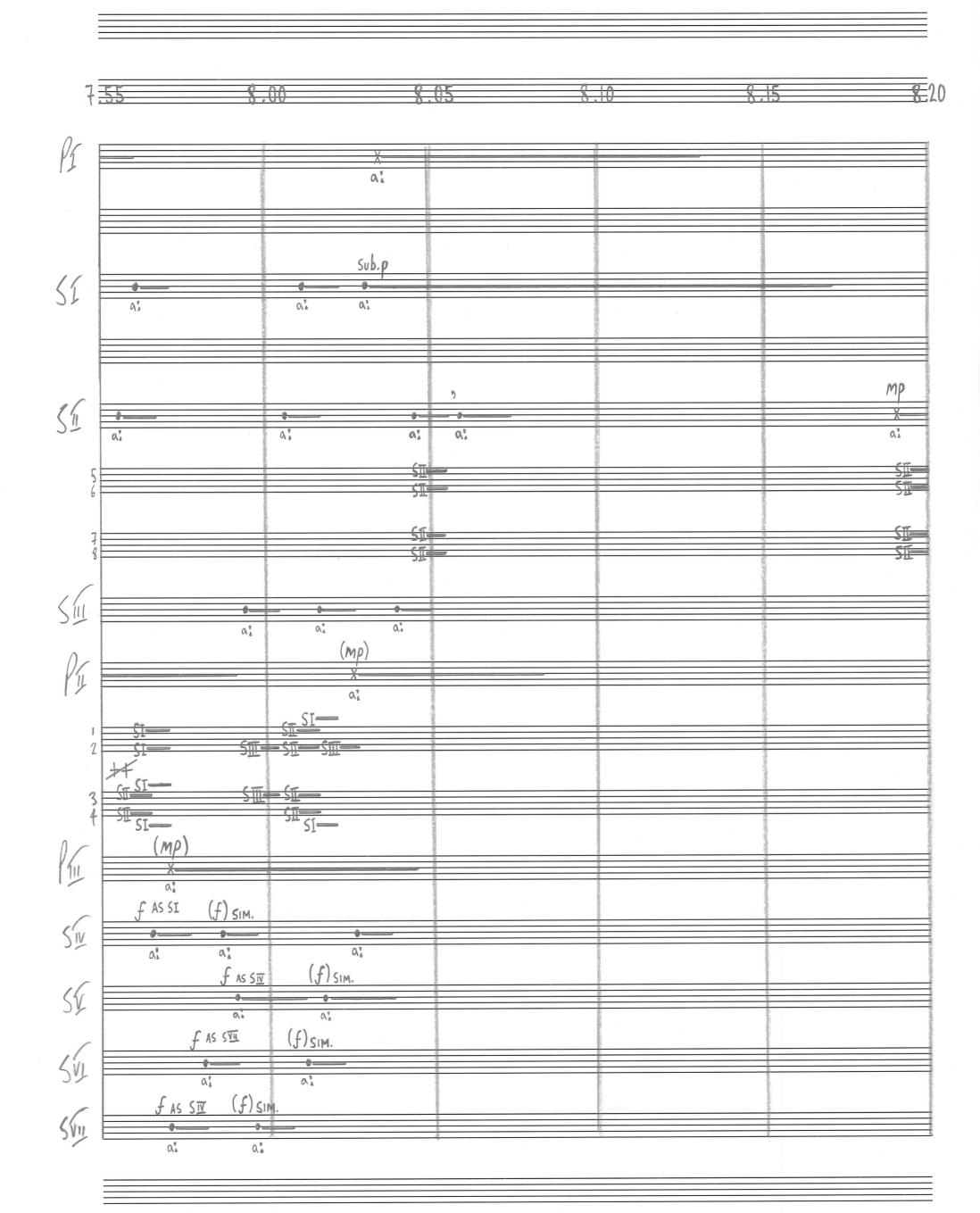
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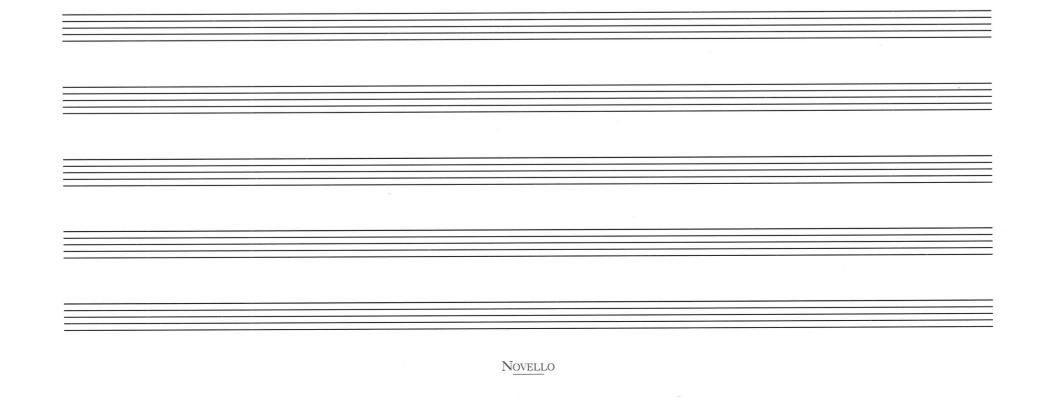




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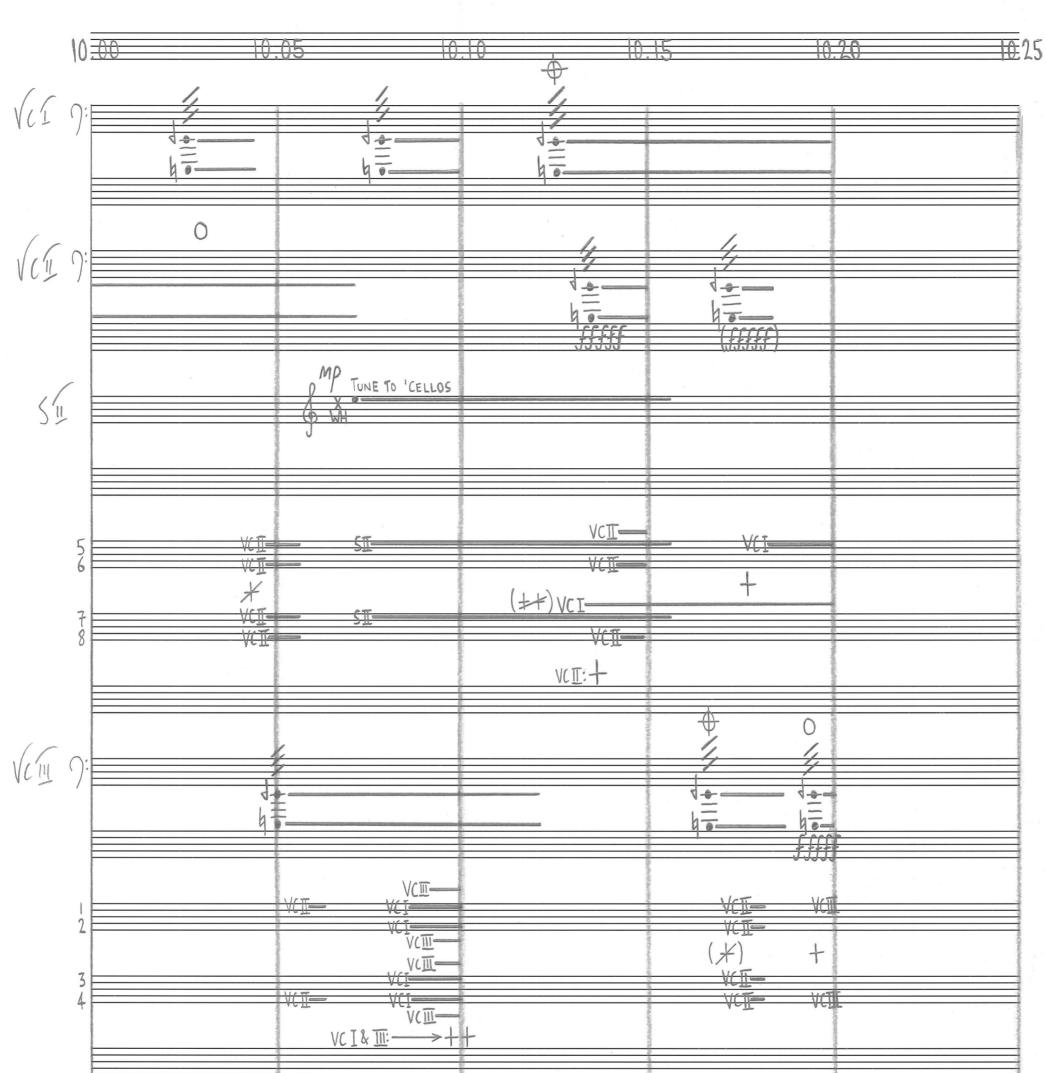
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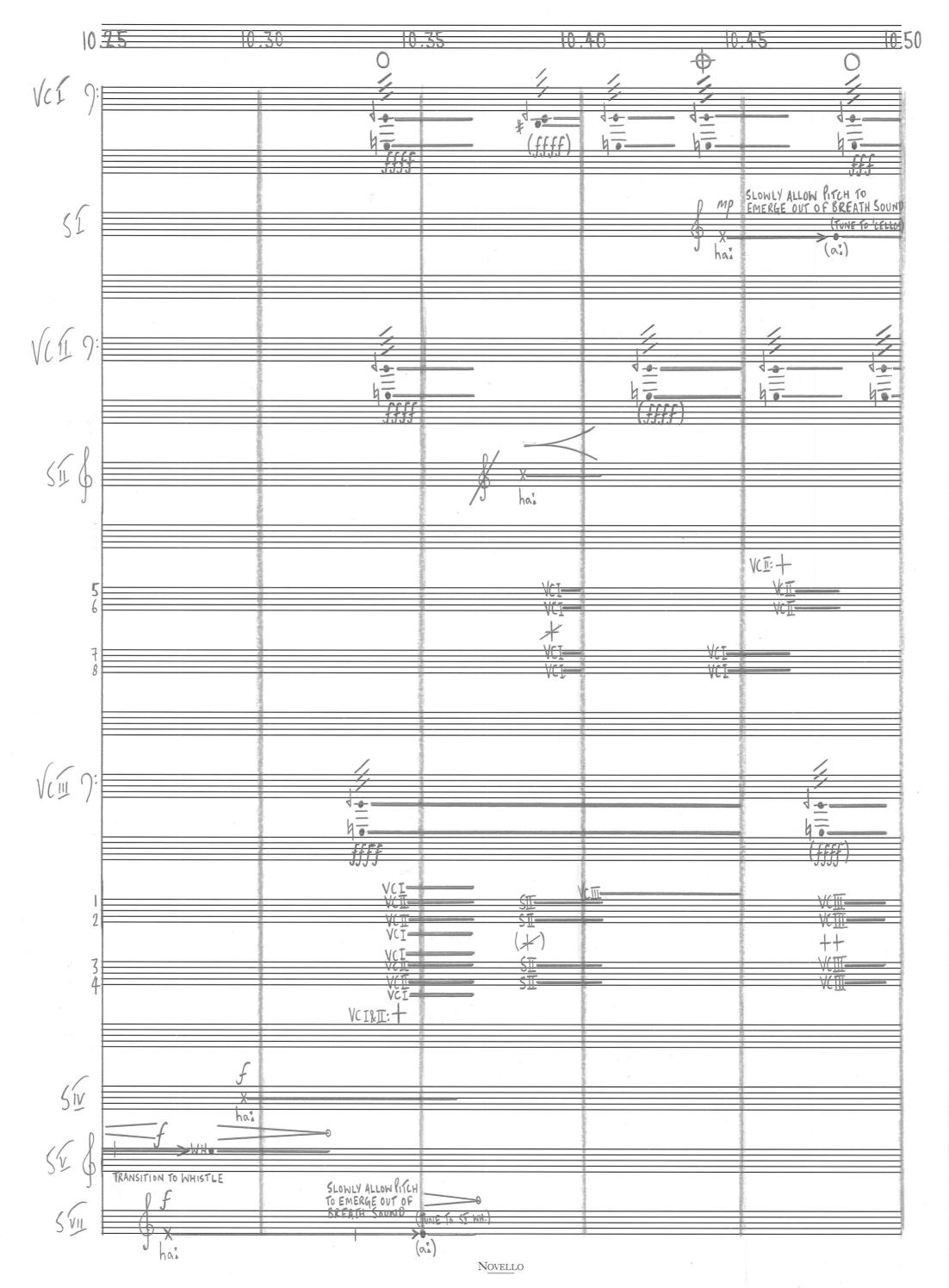






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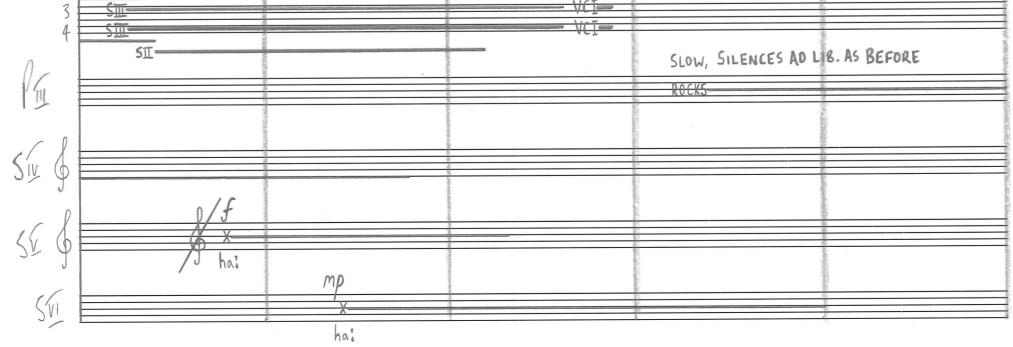






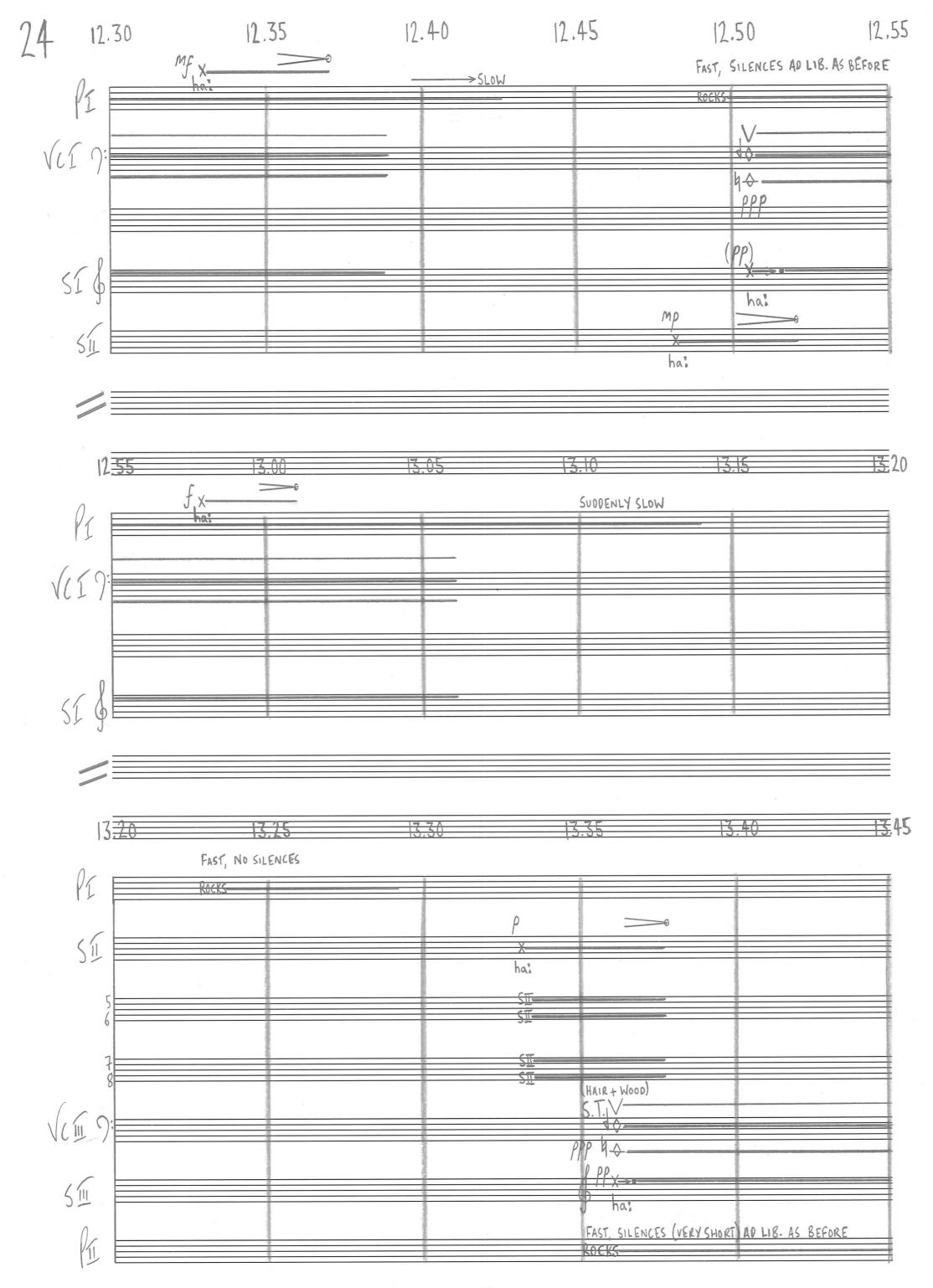
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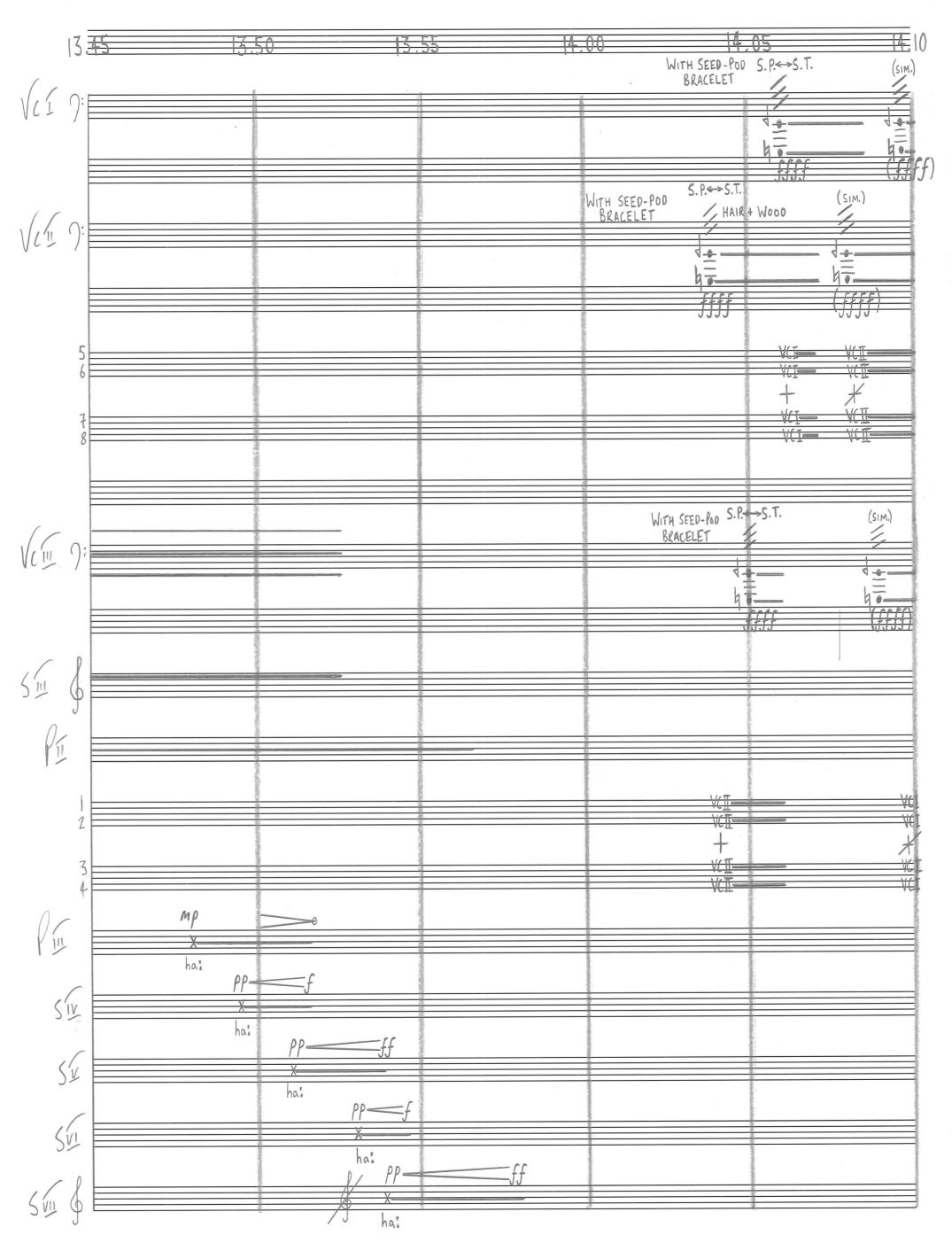
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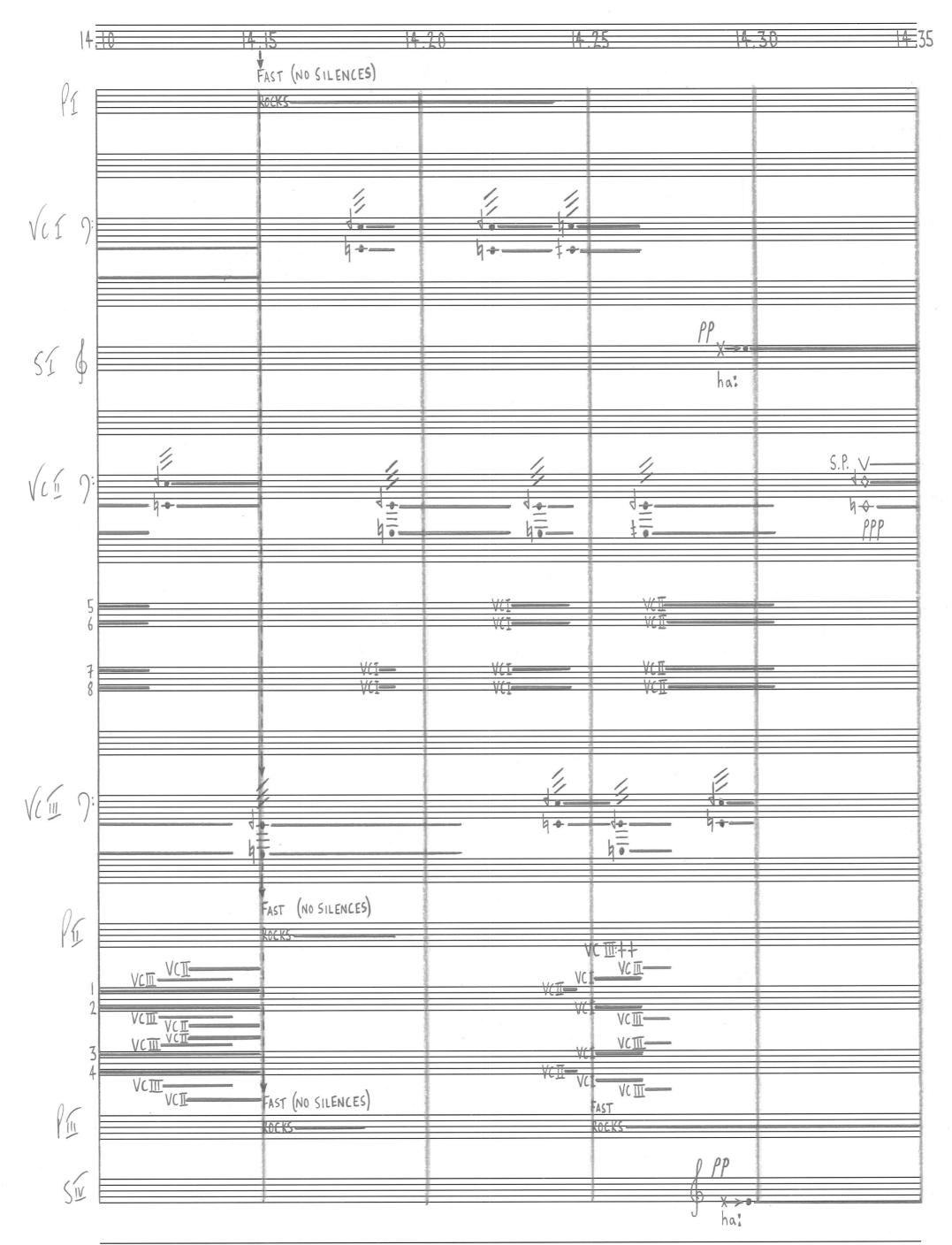


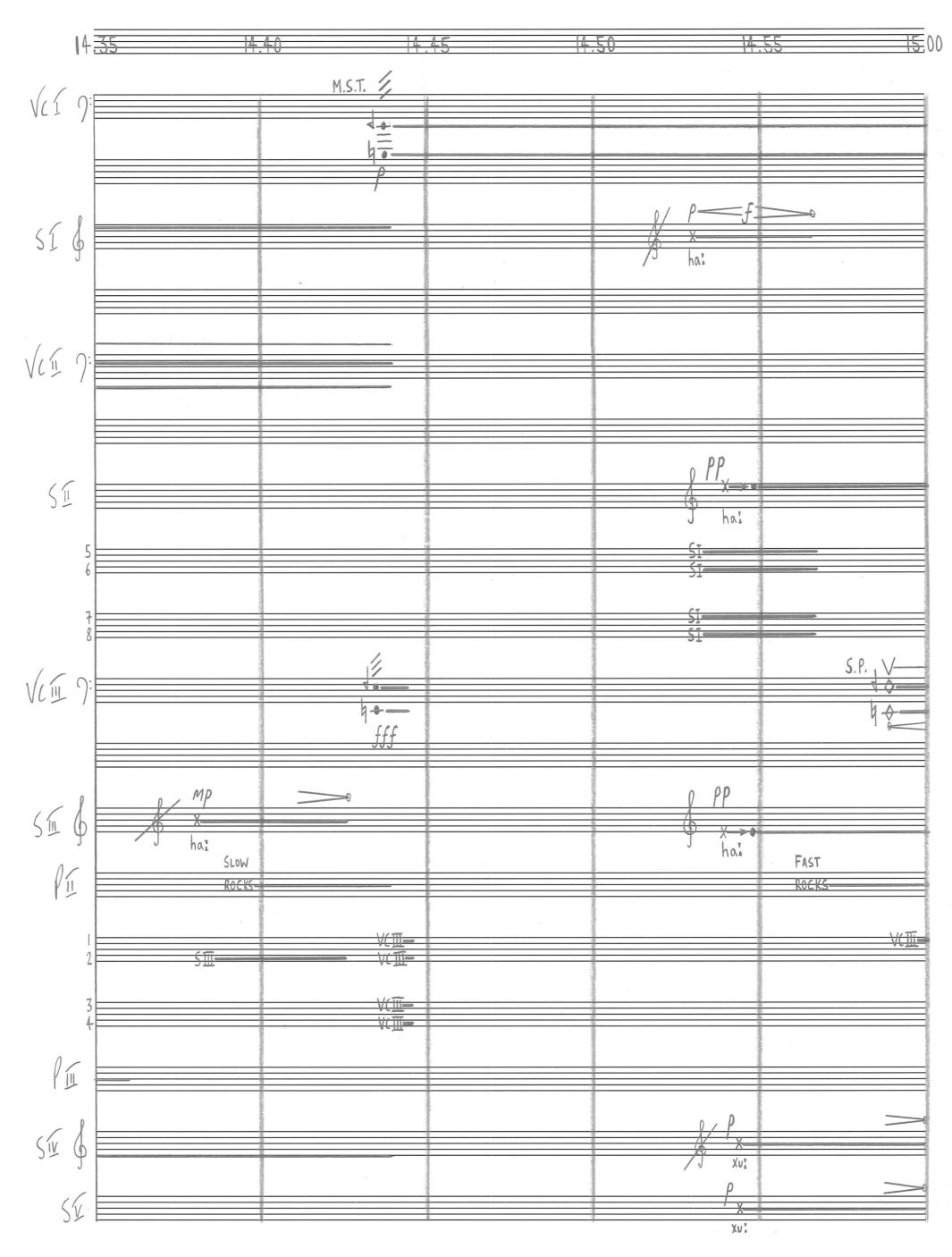


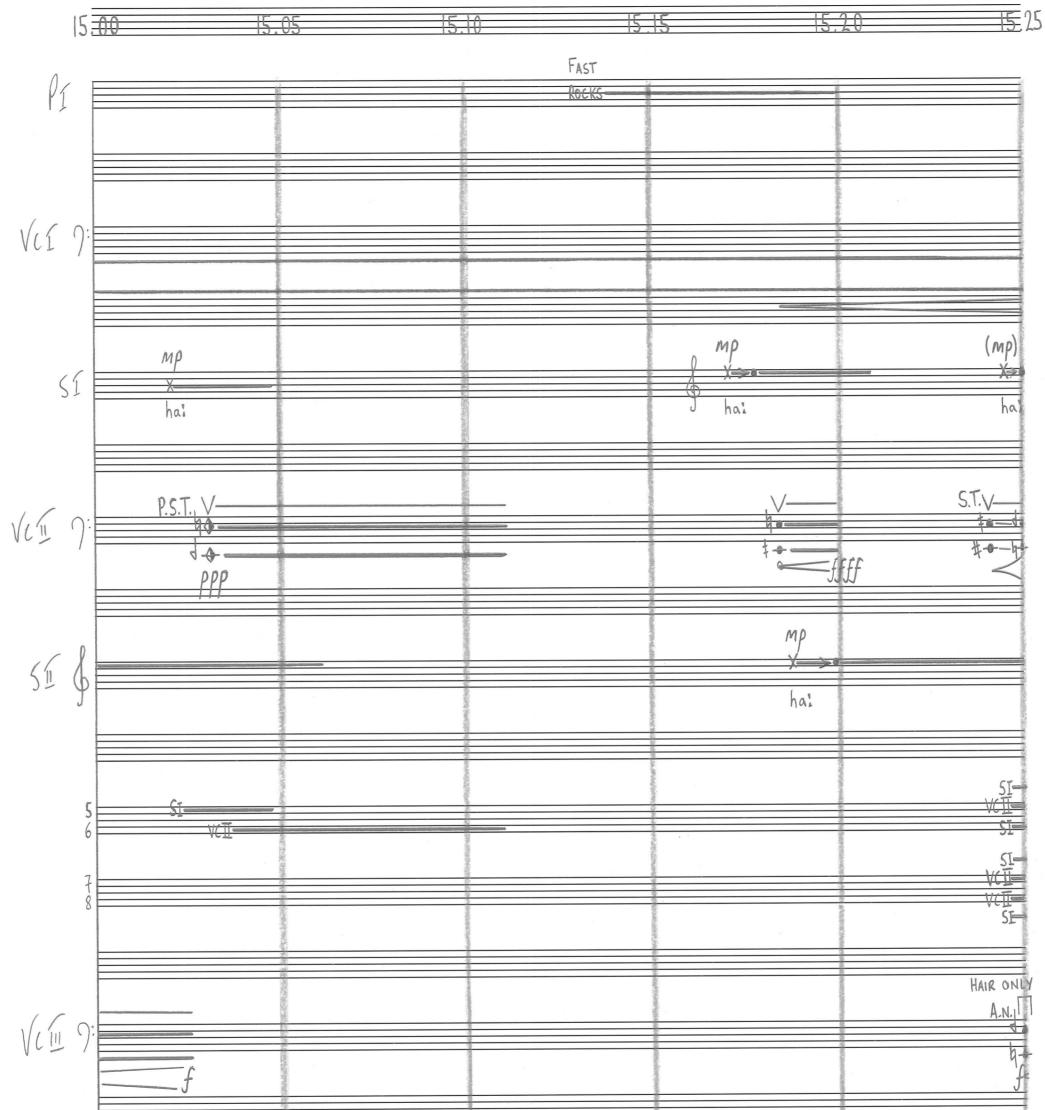
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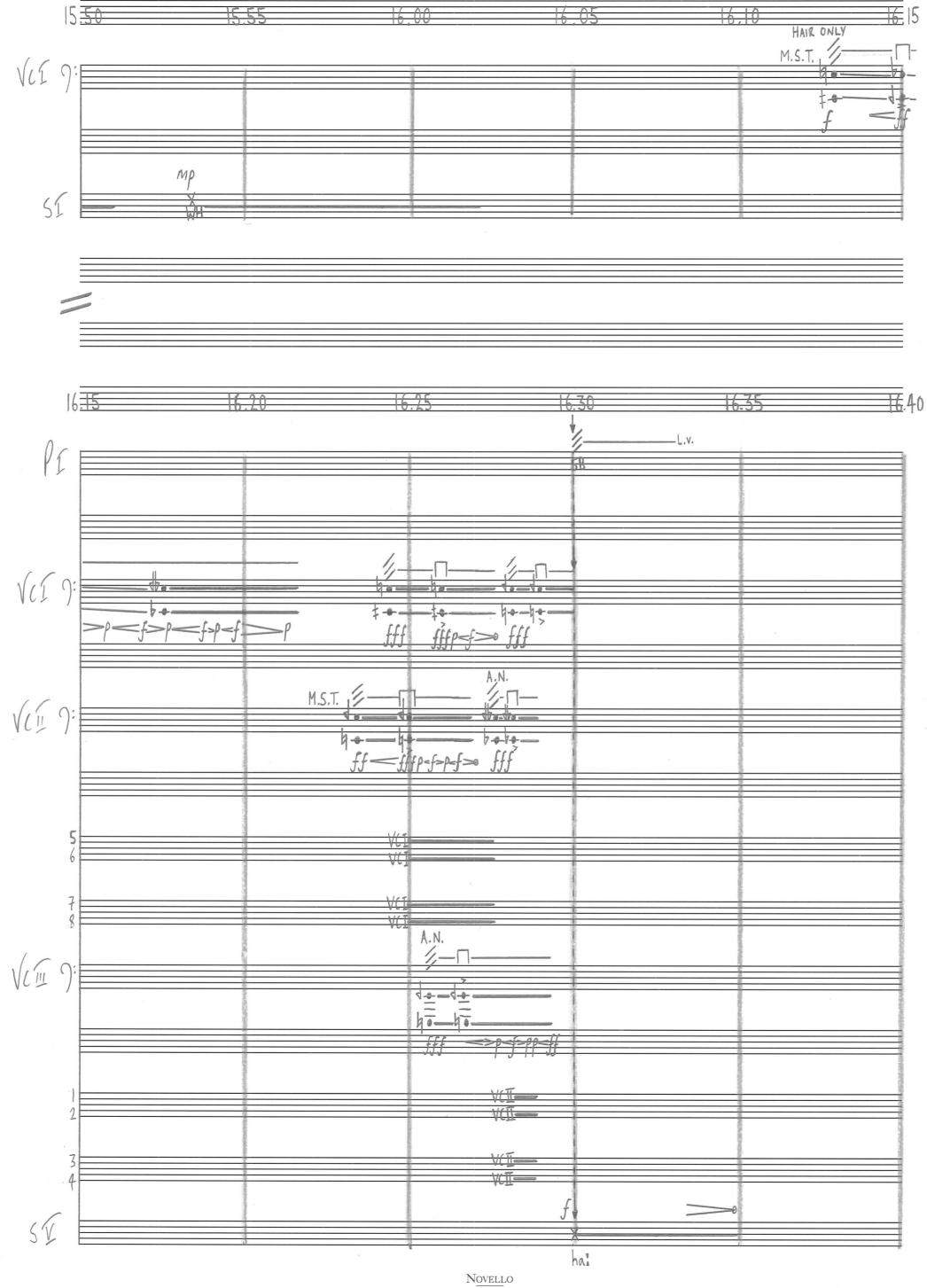




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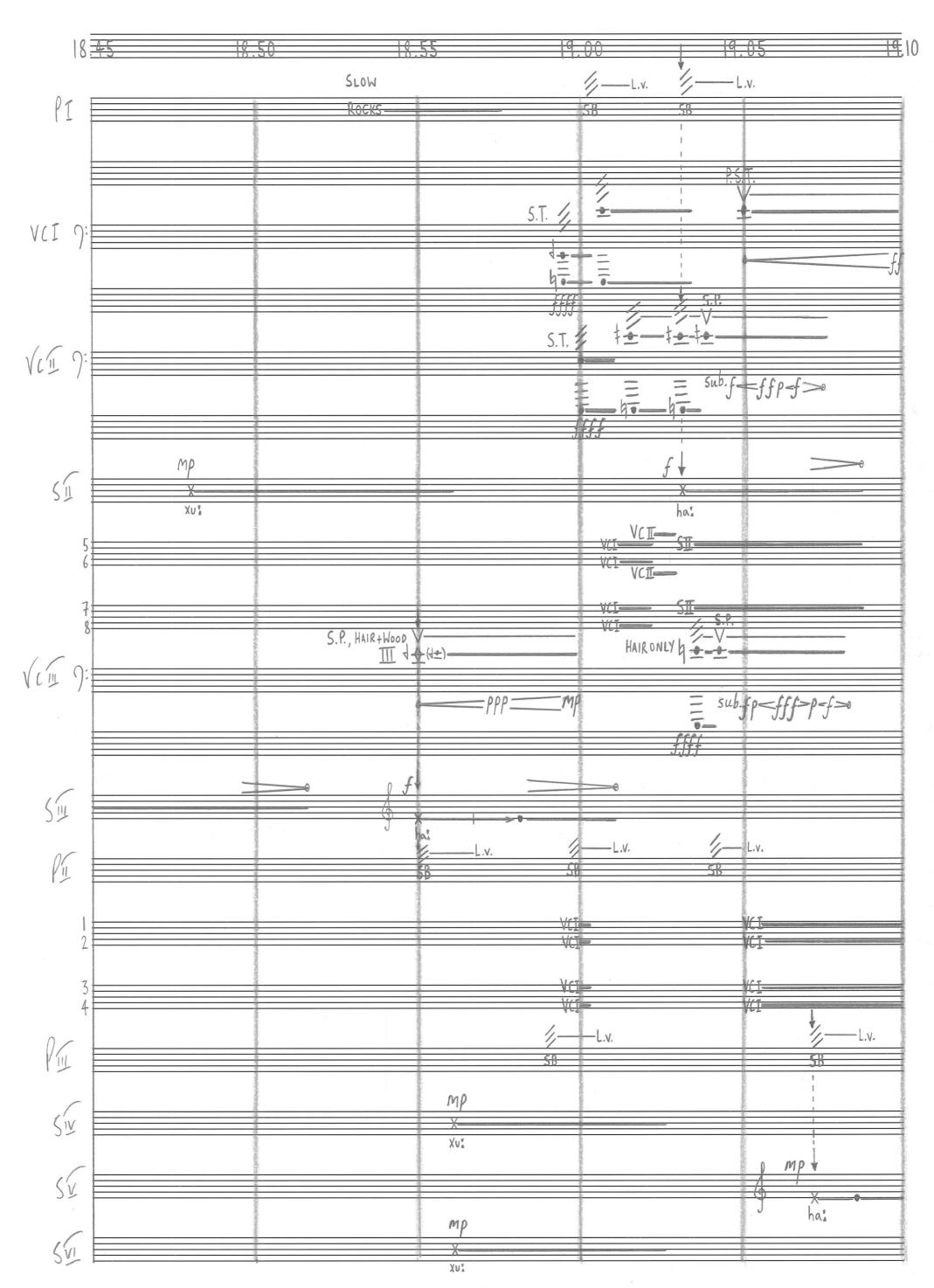


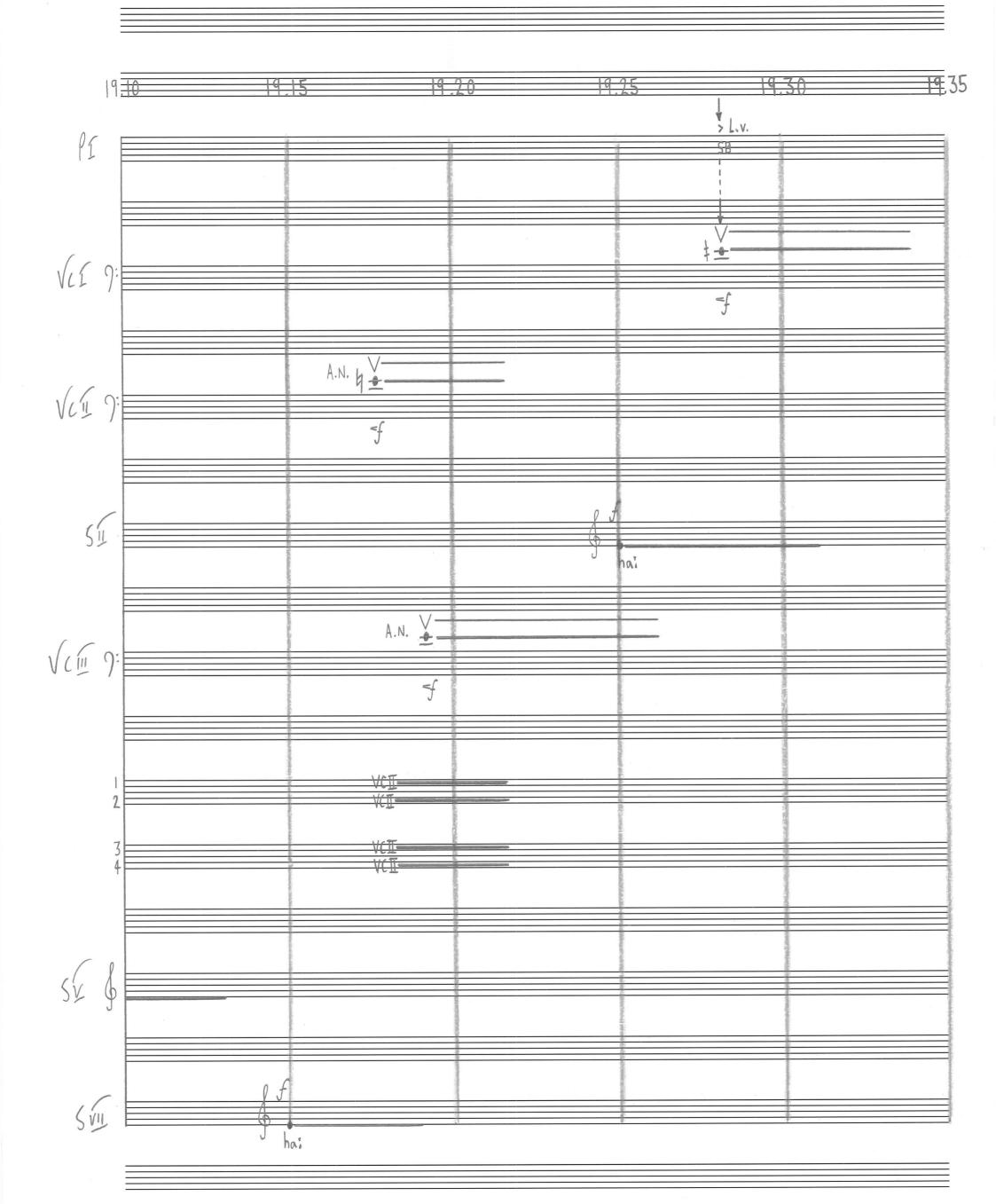
















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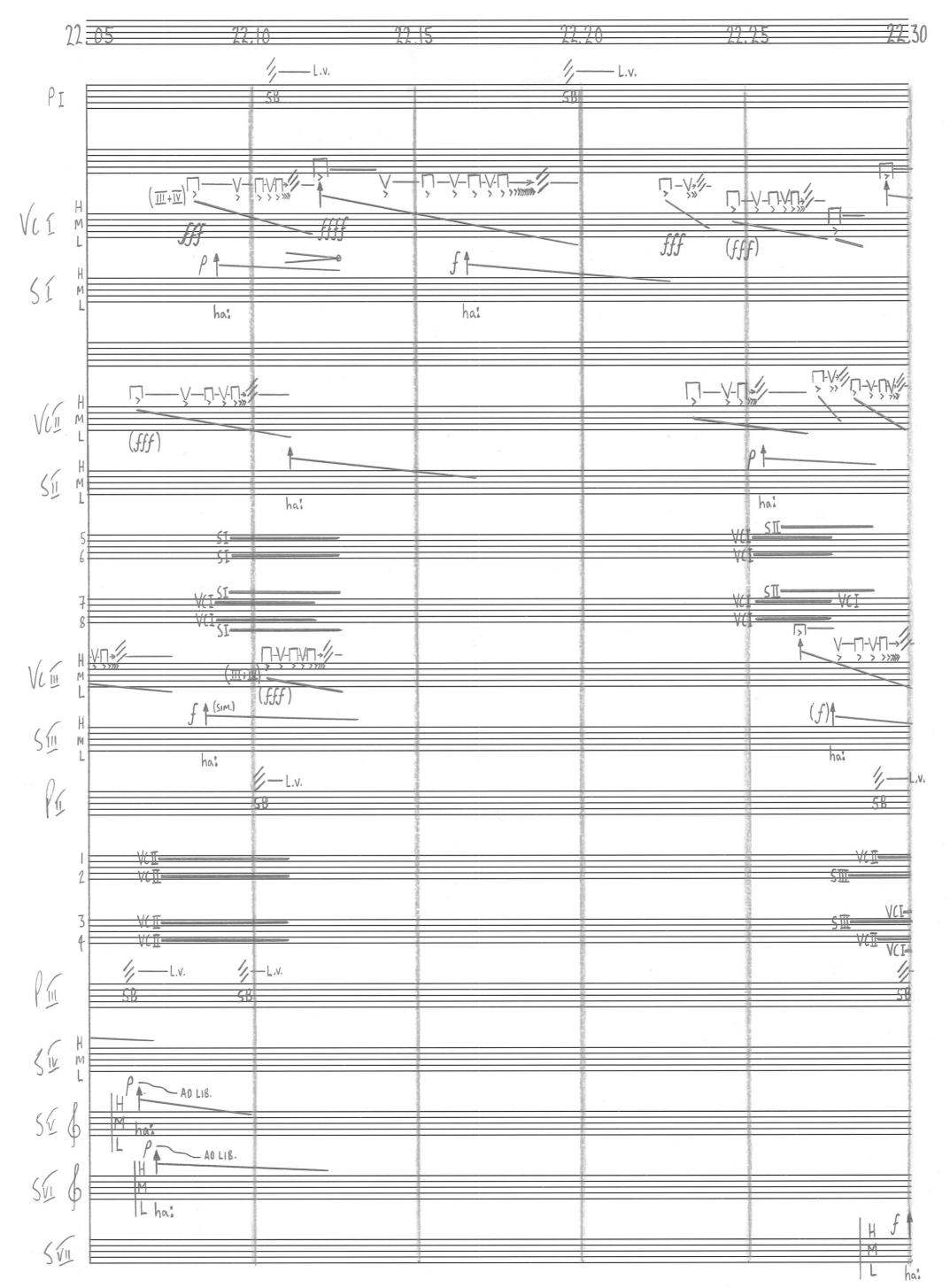






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