Charged Electrons from the Solar Wind Victor Arul for orchestra, 2020, full score	

This piece lasts for approximately 9 minutes.
The piece was premiered on 28 August 2020, at the University of Western Australia's Callaway Music Auditorium. The piece was premiered by the University of Western Australia's Symphony Orchestra, conducted by James Ledger.
This piece is titled after the physical processes that concern the creation of aurorae, fitting with the theme of 'Northern Lights' for the University of Western Australia's 2020 theme for their primary composition competition. Furthering the theme of 'Northern Lights' is a quotation of Jean Sibelius' Symphony No. 2 towards the end of the piece.

- 2 flutes (2nd doubling piccolo)
- 2 oboes (2nd doubling cor anglais)
- 2 clarinets (Bb, 2nd doubling bass)
- 2 bassoons
- 4 horns
- 2 trumpets (C)
- 3 trombones (3rd playing bass)

Tuba

Timpani

Percussion 1 (cow bells (chromatic set), large suspended cymbal, suspended china cymbal, flexatone, whip, slide whistle, marimba, tubular bells)

Percussion 2 (vibraphone, temple blocks, crotales, snare drum, suspended cymbal, whip, tubular bells)

Percussion 3 (tom-toms (5), wood block, bass drum, 2 suspended cymbals (small and large)

Violin 1

Violin 2

Viola

Cello

Double Bass



The crossed notehead for the oboe indicates to play a multiphonic which produces a pitch (either the primary note or composite pitches) as close as possible to the one notated on the staff For the flute, these indicate short, quick jet whistles.

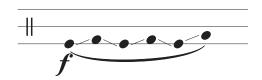


This notation represents clusters from the violins, the rectangle showing the rough range covered. Only two different clusters are used in this piece, one for the first violins and one for the second violins. The clusters contain the following pitches, which are to be distributed among the section equally. Arrows depict quarter-tone deviations (up means to sharpen, down means to flatten). Note that this notation does not specify a mode of sound production in of itself, only a pitch collection. Thus, a mode of sound production (e.g. random pizz, col legno) will be specified.





Violin 2

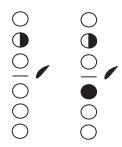


The notation for the slide whistle part is notated on three lines. The top line represents the highest pitch. The bottom line represents the lowest pitch. The middle line represents the mid-point between the highest and lower pitch,



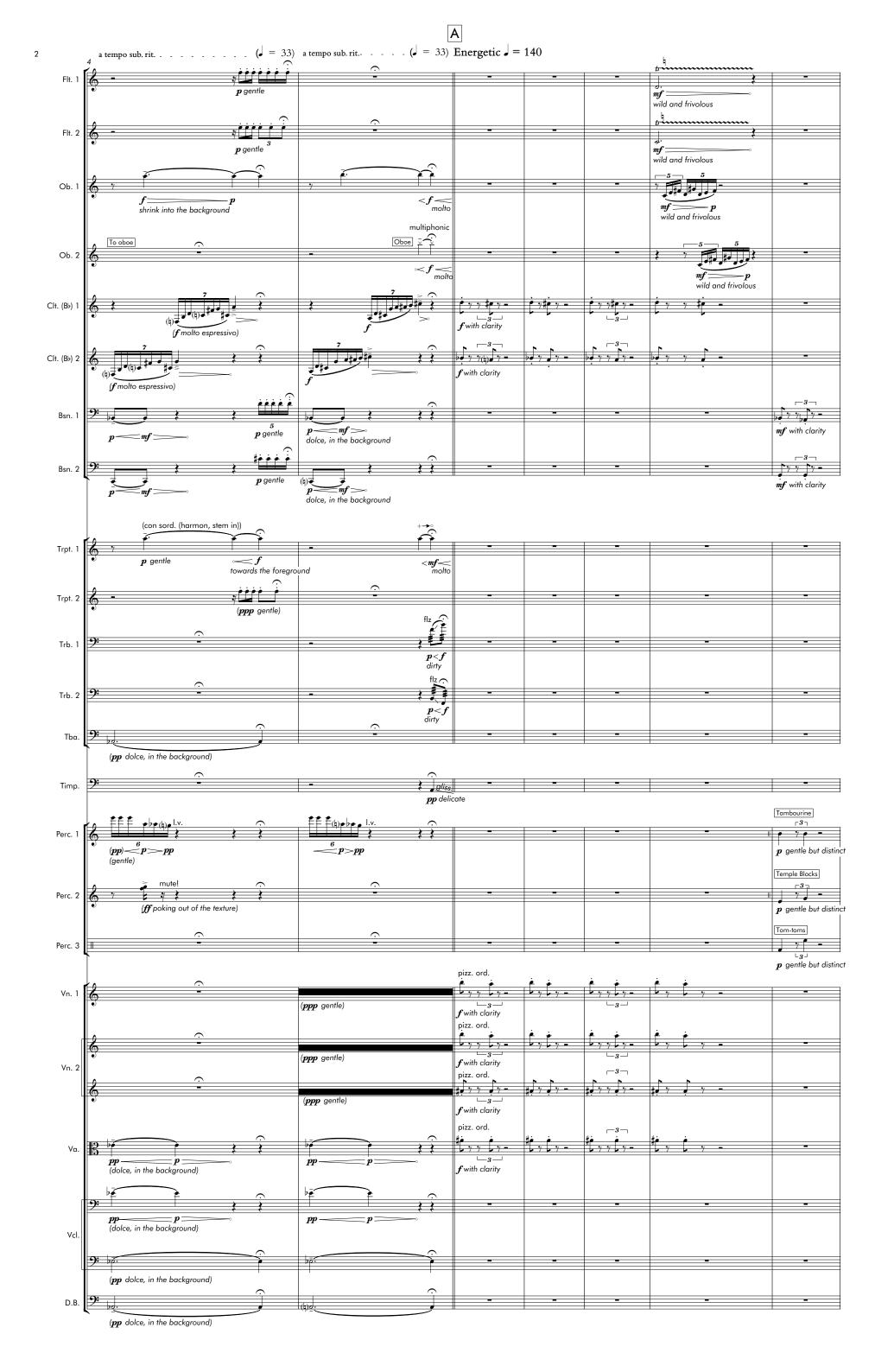
This notation (without a trill sign) indicates for the player to employ wide, rapid vibrato.





The oboists are asked to perform a timbral trill at bar 111. Both oboists use the same timbral trill, indicated by the alteration of the two fingerings shown here.

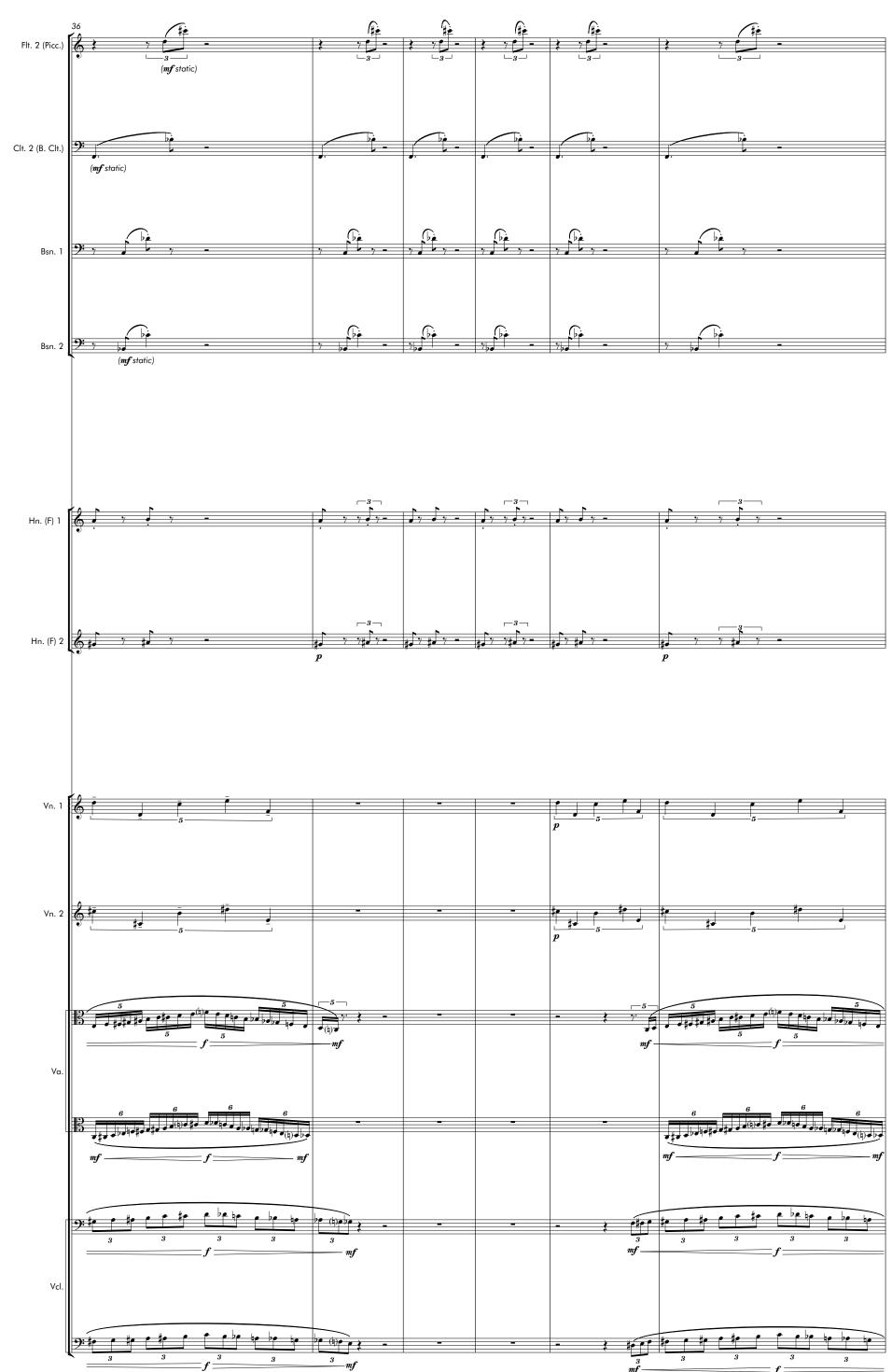


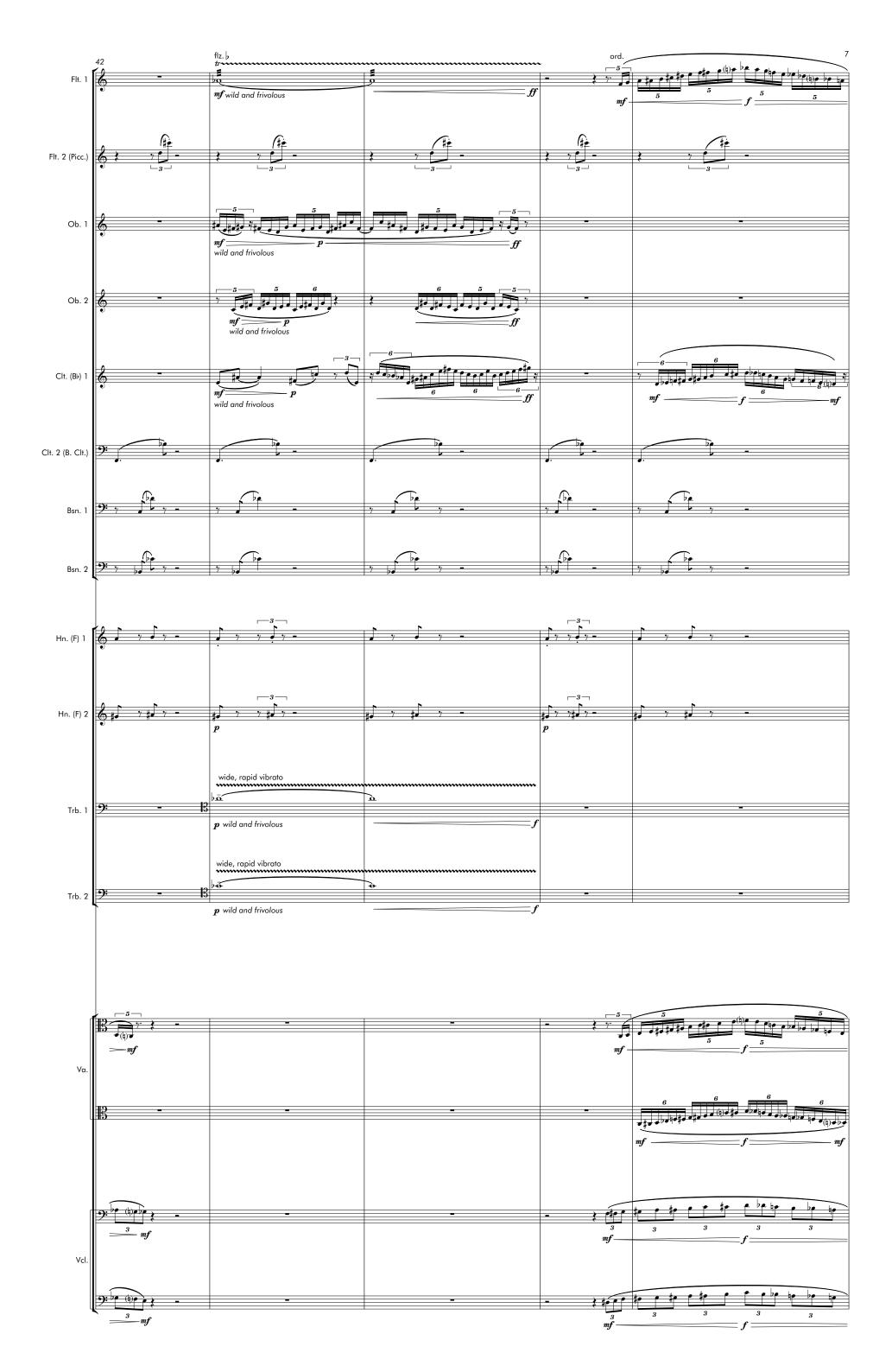




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 $m{f}$ strong

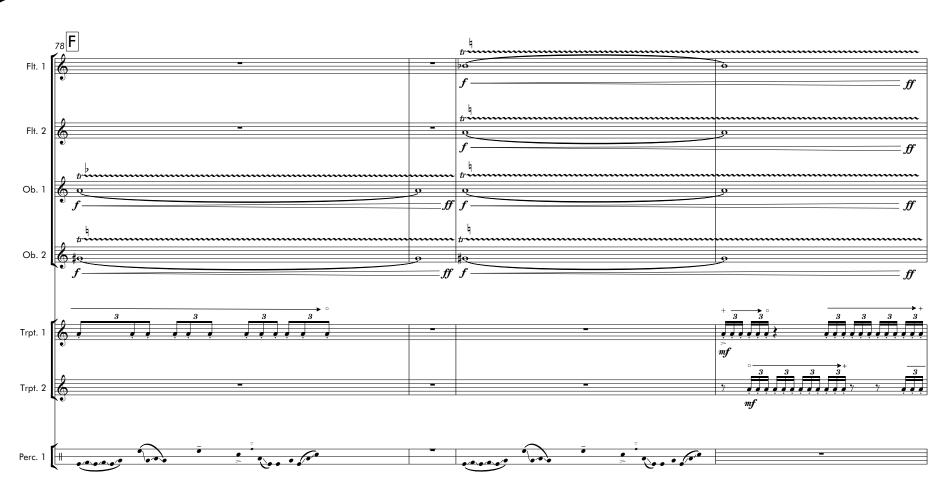


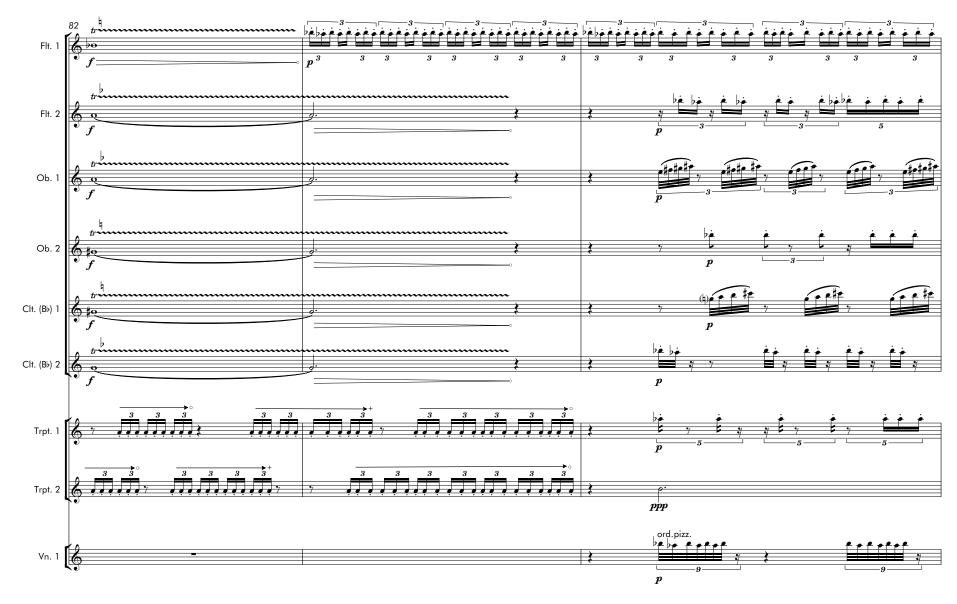


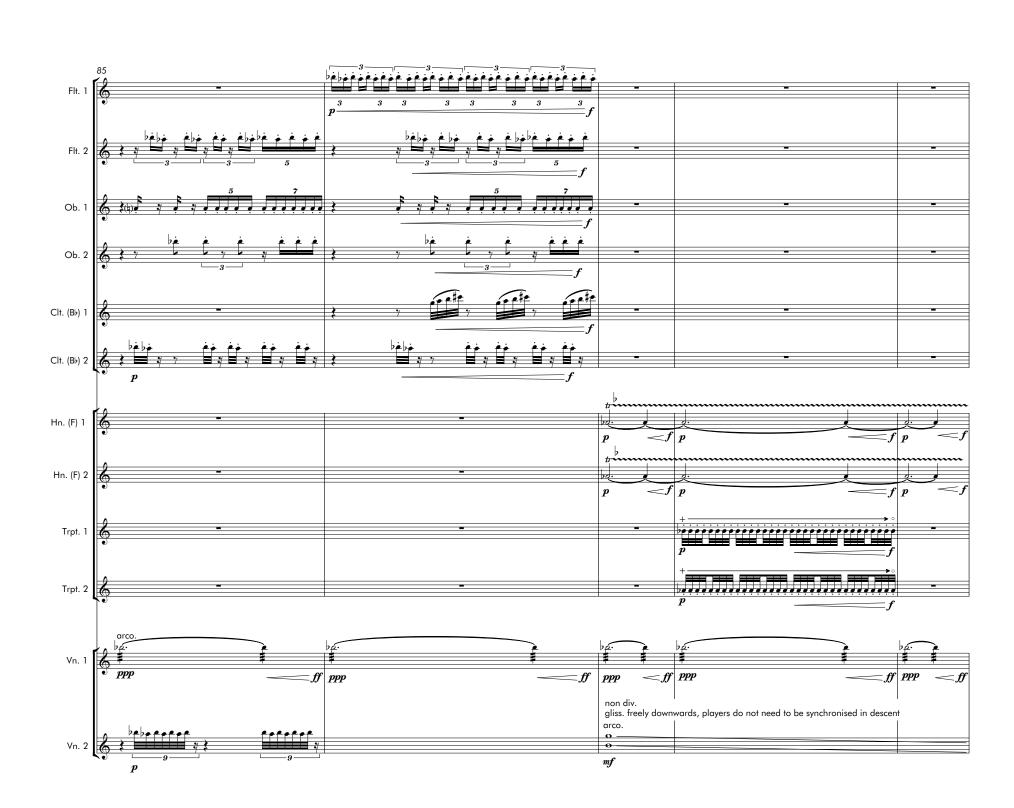






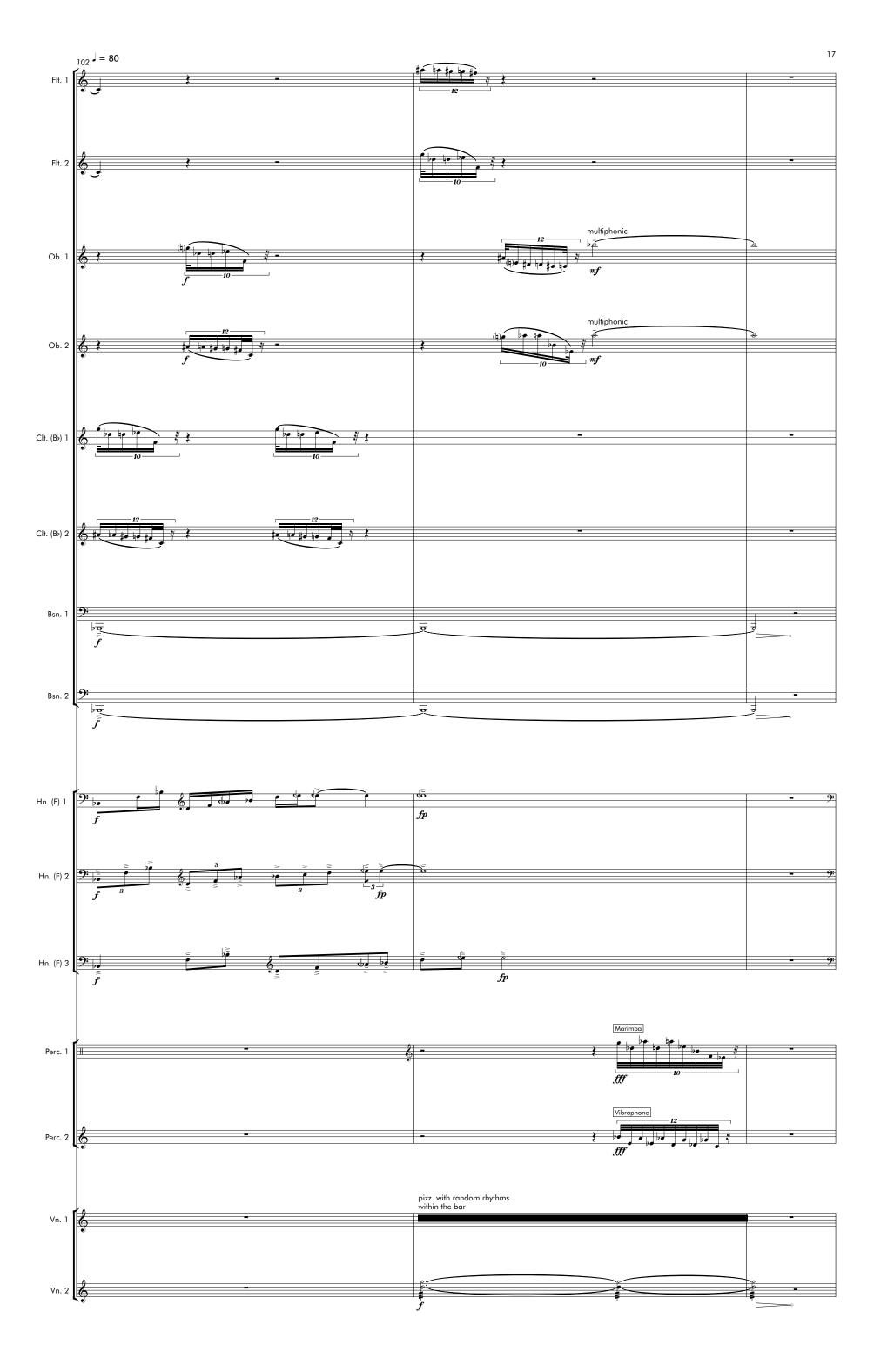


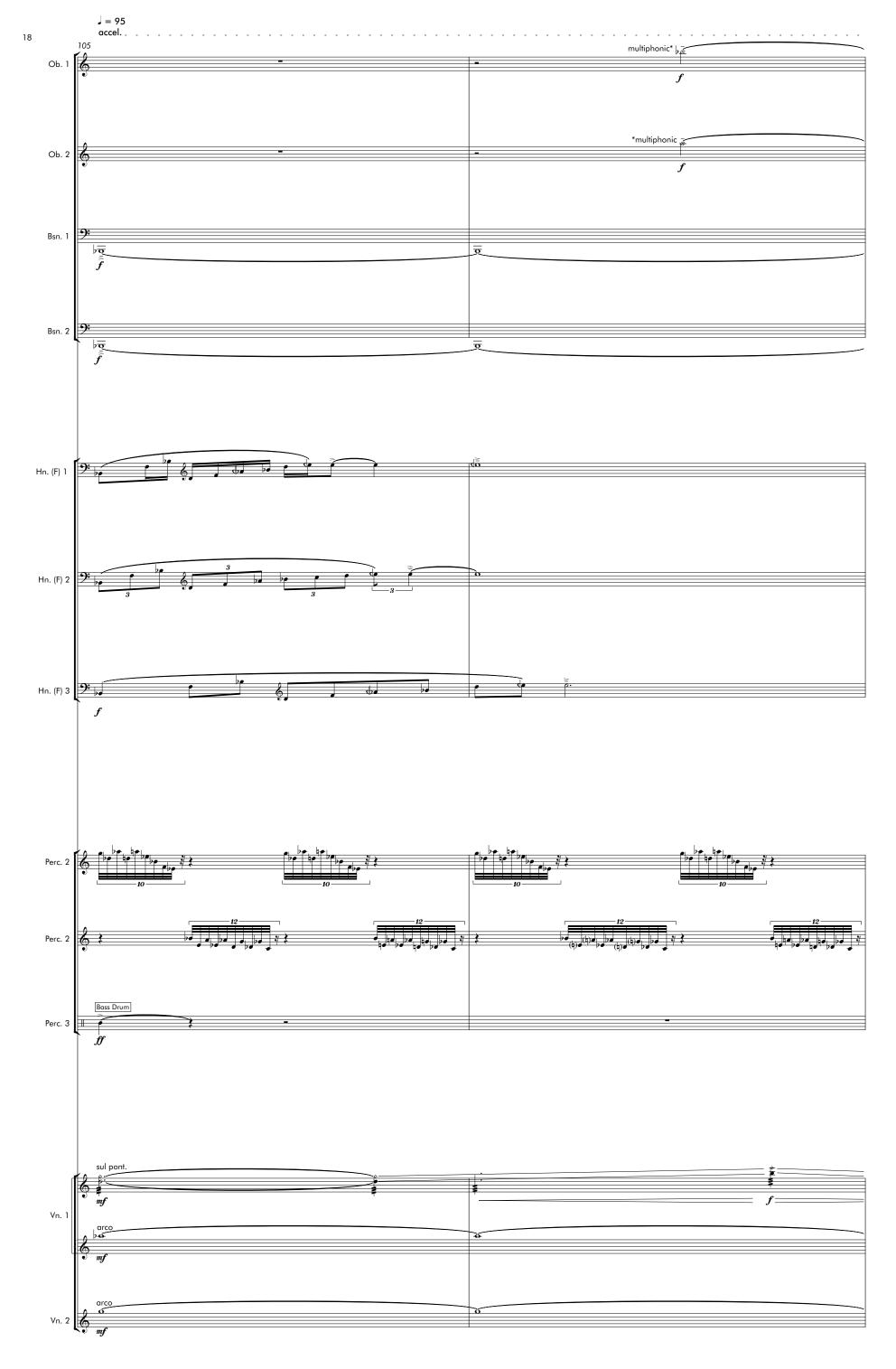
















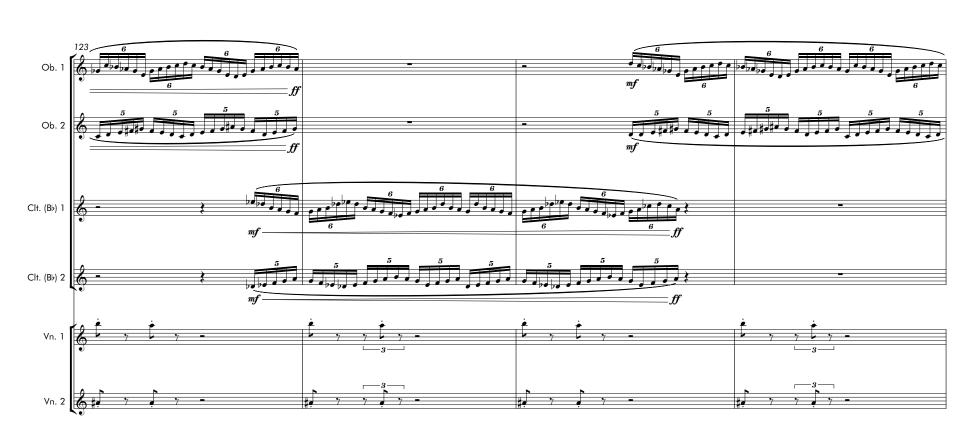


H = 140

To regular flute

Ob. 2





mf

























