Newton Armstrong

making one leaf transparent and then another (2012)

for piano and electronic sounds

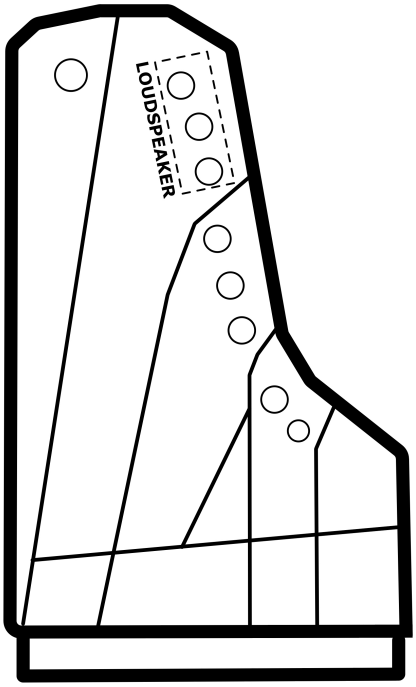
PERFORMANCE NOTES

Twelve cues are indicated in the piece (beginning in bar 80), for the triggering of pre-recorded electronic sounds. The electronic sounds are available at:

http://staff.city.ac.uk/newton.armstrong.1/making-one-leaf-transparent/sounds.zip

The electronics cues must be exactly synchronised with the corresponding piano attack. The most straightforward means for achieving synchronisation is by mounting a microphone (miniature omni-directional or surface-mount PZM) on the frame inside the piano, and employing an onset-detection algorithm. The onset detector will require a gate to be opened immediately prior to each of the twelve cues (by the electronics operator, or by the use of a controller pedal at the piano), and logic to prevent re-triggering (e.g. a switch for closing the gate immediately after detection of an onset).

The electronic sounds are played back through a single mid-range loudspeaker, placed face down inside the piano, and covering the resonance holes for the lower strings (see diagram below). Padding will need to be used. The piano strings and soundboard act as an extended resonator for the electronic sounds.



There should be a fusion of acoustic and electronic sources, and a clear sense (from the listening perspective of the audience) of a blurring of identities. The levels of the twelve soundfiles have been set at optimal degrees of relative loudness. However, it's likely that the levels will need to be individually adjusted for each performance, taking into account the particularities of the piano, the loudspeaker, and the acoustic space. When the levels are set correctly, a balanced and blended acoustic image will be achieved through the spectral fusion of the acoustic and electronic sources.

Newton Armstrong, June 2012

PROGRAMME NOTE

Two key ideas run throughout this piece, operating on different timescales, and often being held in tension. At the local level, the concern is with visual metaphors, specifically the ways in which the perception of simple objects can be transformed under changing light and focal depth, or through processes of absorption, scattering, refraction, and diffraction. At the global level, the concern is with a gradual shift of focus from the 'outer' to the 'inner' aspects of the sound, from 'note' to 'sonority'. The title is taken from the opening of Virginia Woolf's *The Waves*: "The light struck upon the trees in the garden, making one leaf transparent and then another."

making one leaf transparent and then another

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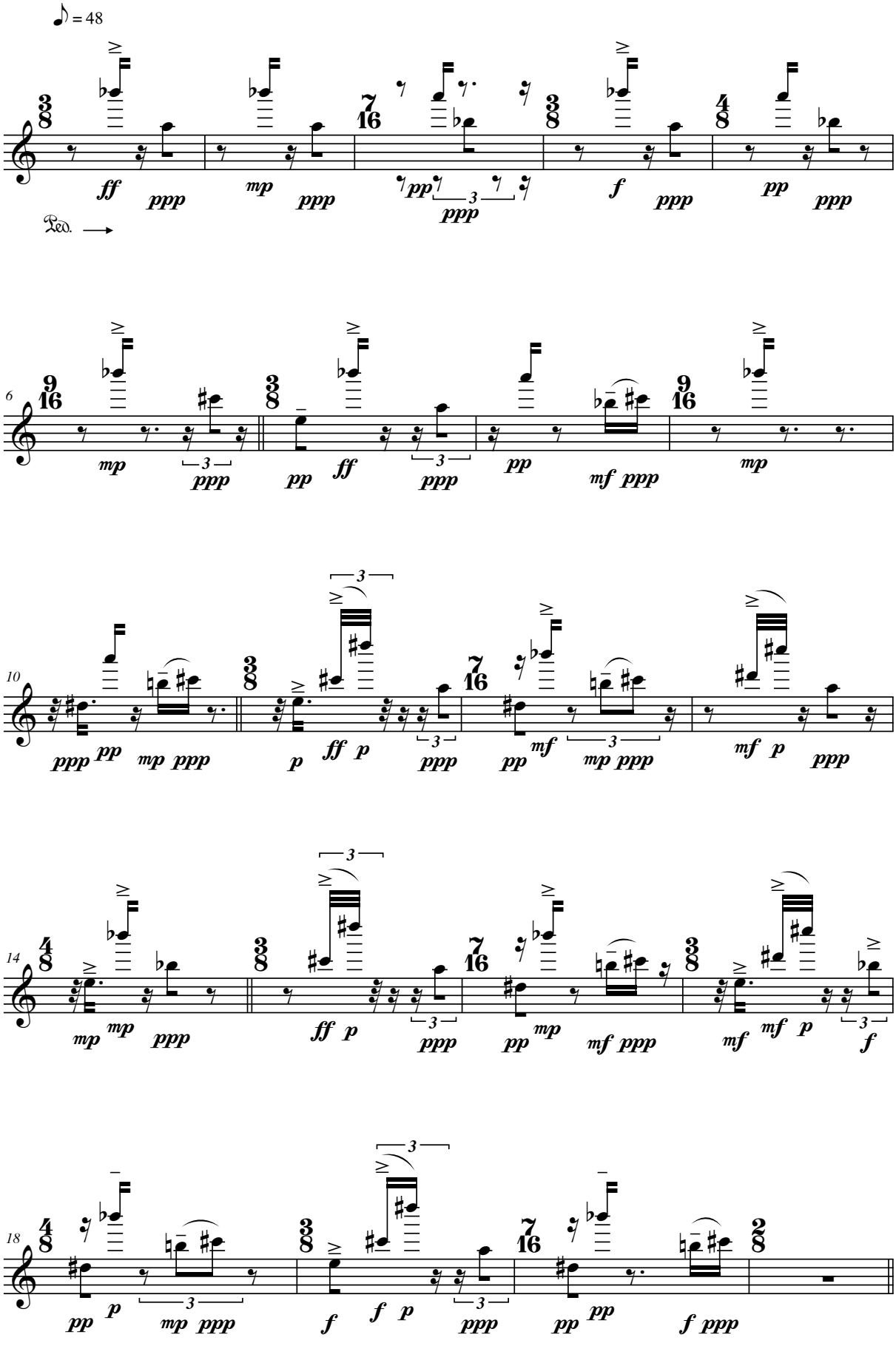

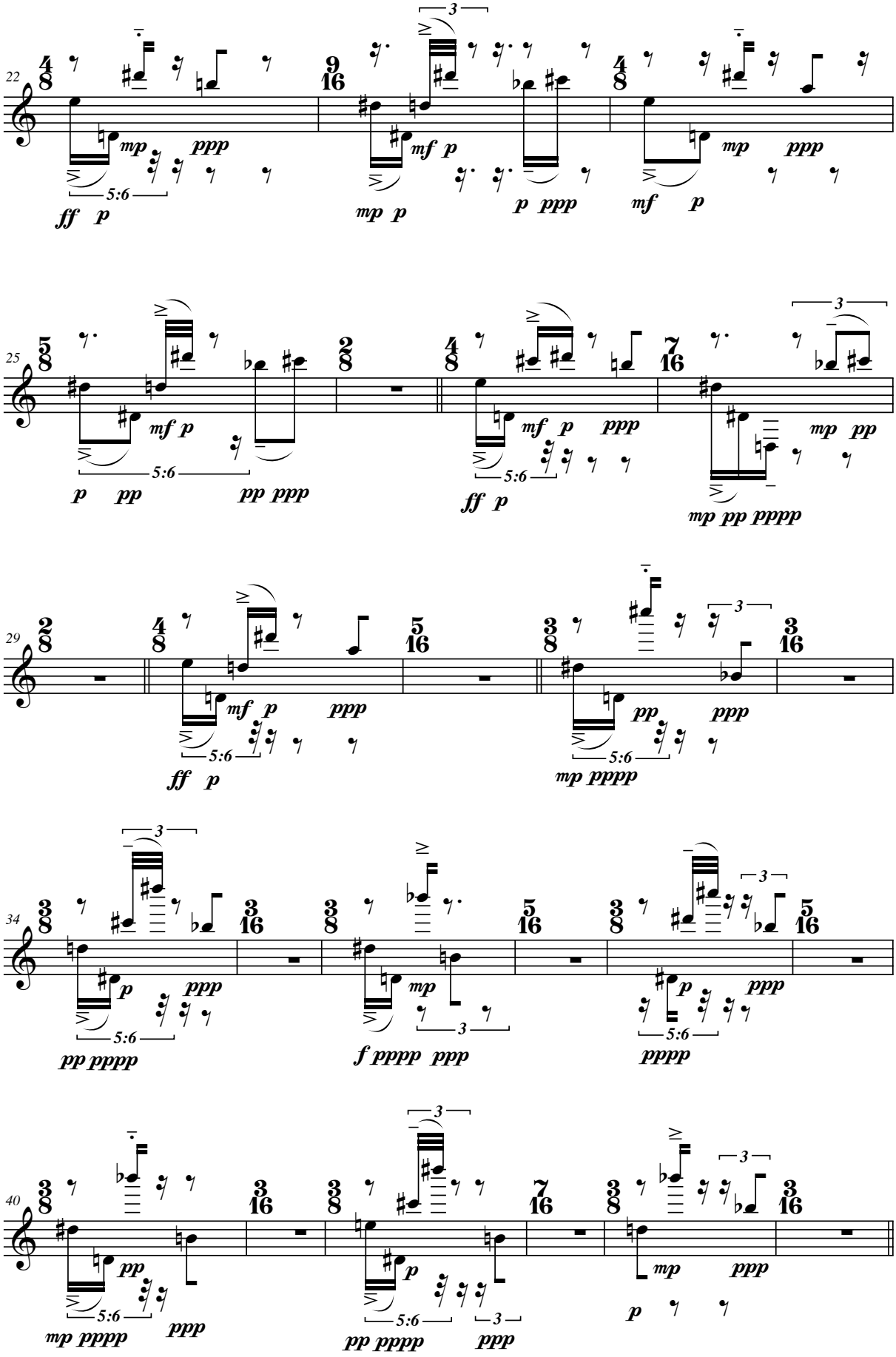
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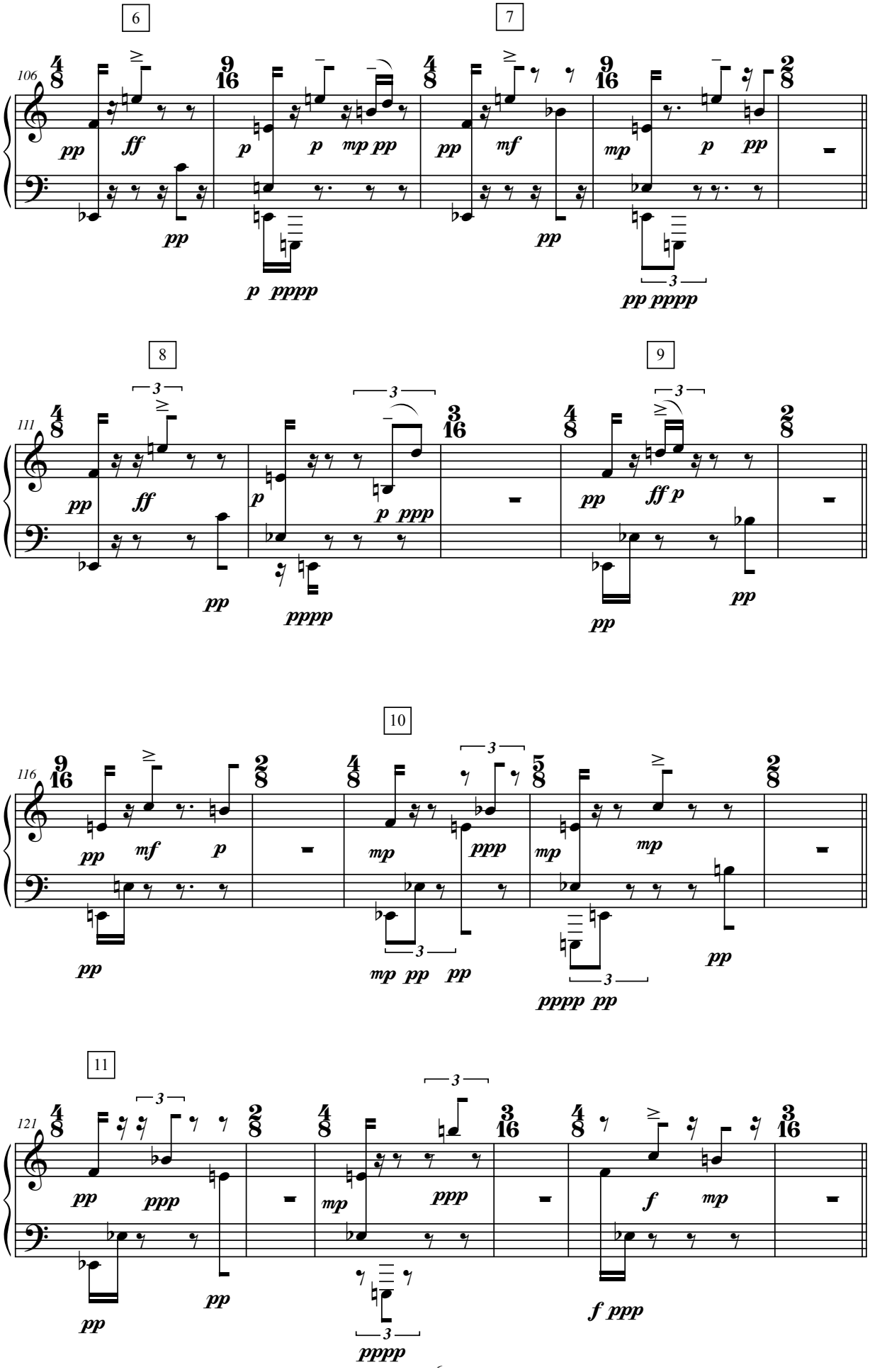
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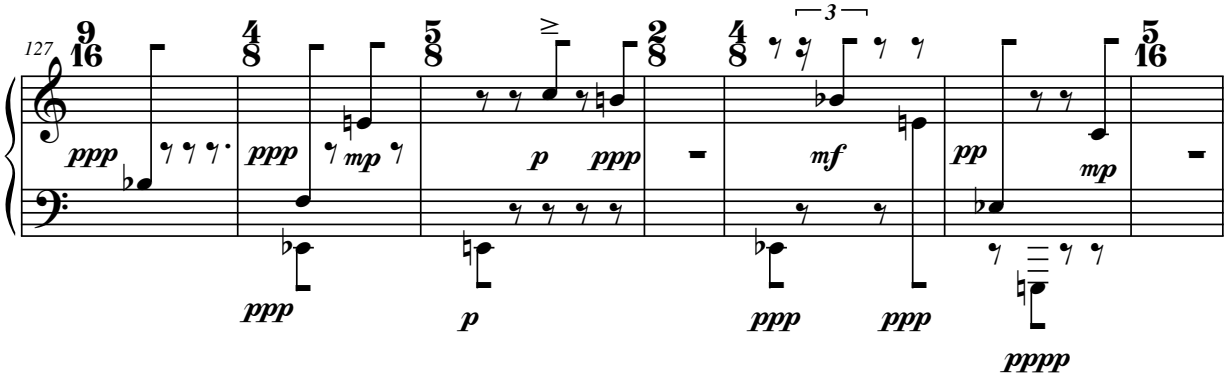
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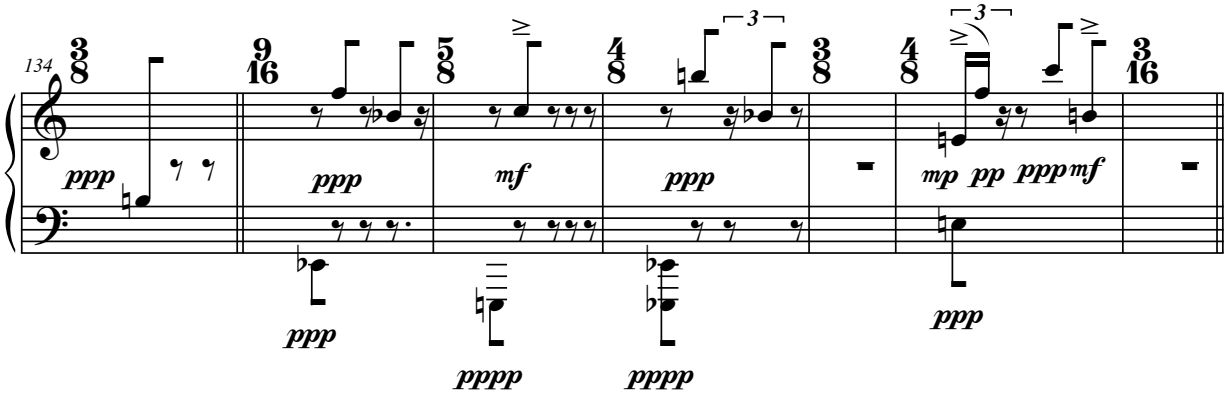
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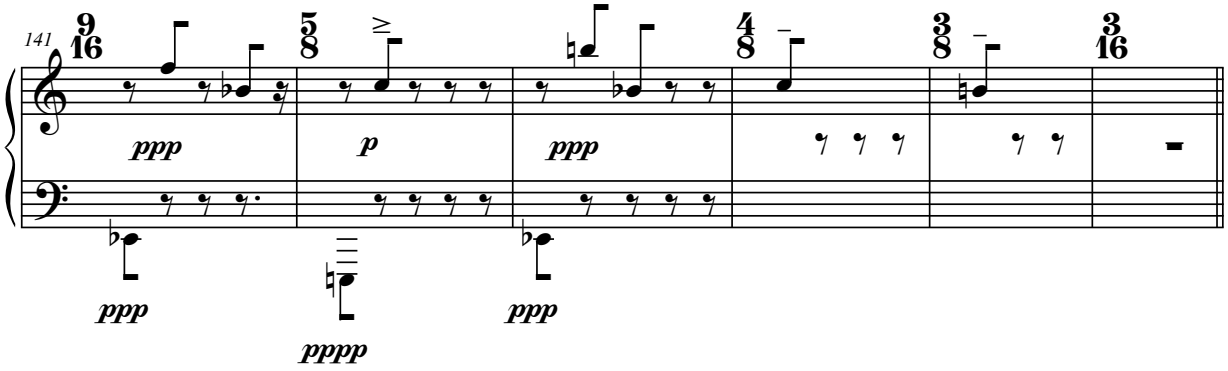
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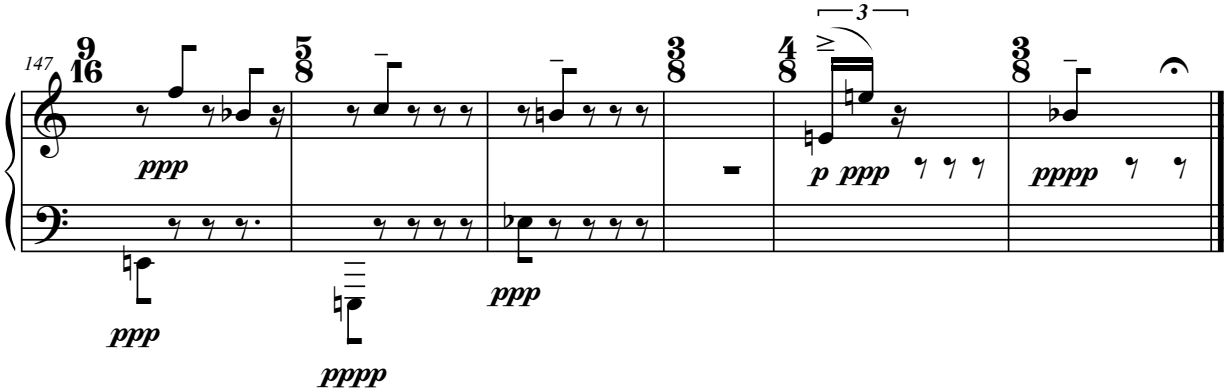
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