Intrusions

Intrusions is an exploration of an application Messian's modes of limited transposition. This series of scales have only 2-3 transpositions possible for each scale before returning the same note series. In this piece one mode is used for each hand in the piano, and additional mode is mapped on to a spectral filter allowing the performer to 'intrude' upon the piano part with a different mode by filtering the live performance as well as capturing and editing the piano sound in real time.

The filtering mechanism for the second player was built in the Max/MSP programming environment and functions by allowing several modes of operation. (Figure 1.)

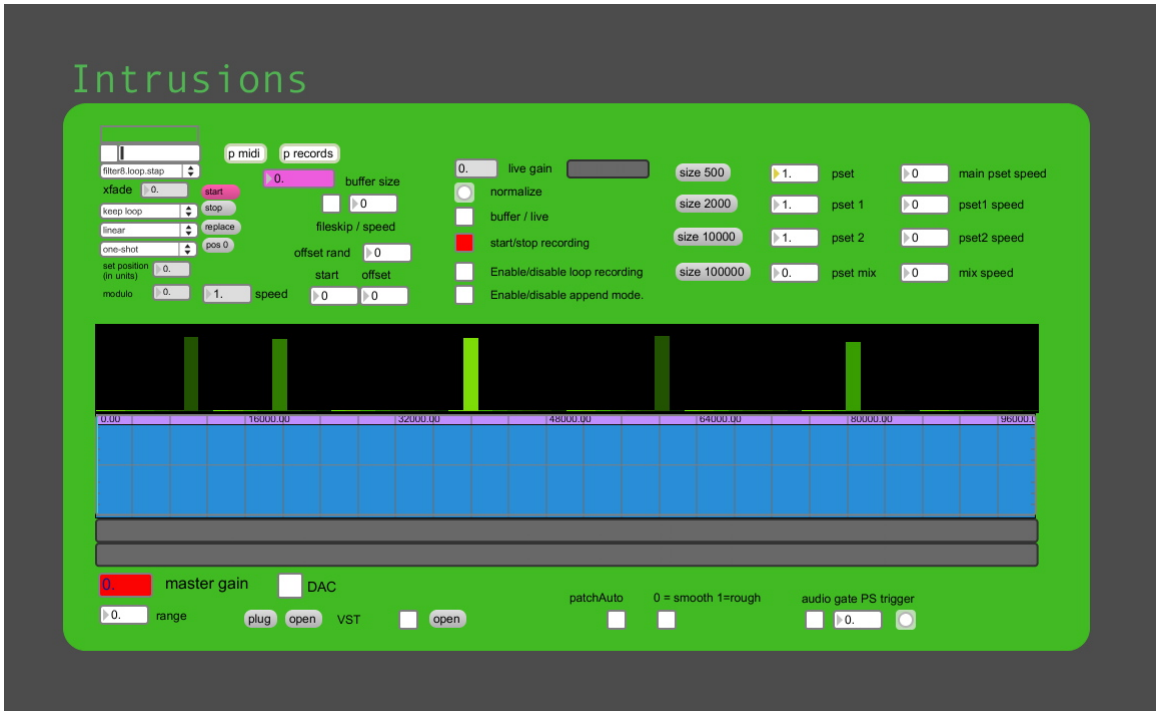


Figure 1.

The first is the realtime application and interpolation of 20 preset filters in any possible combination to live audio. Each of these filters is preset to spell out a single pitch class or combination of notes in Messian's 2nd mode of limited transposition (Figure 2.)

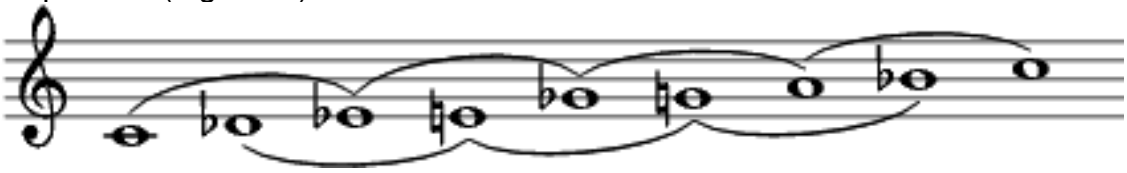


Figure 2.

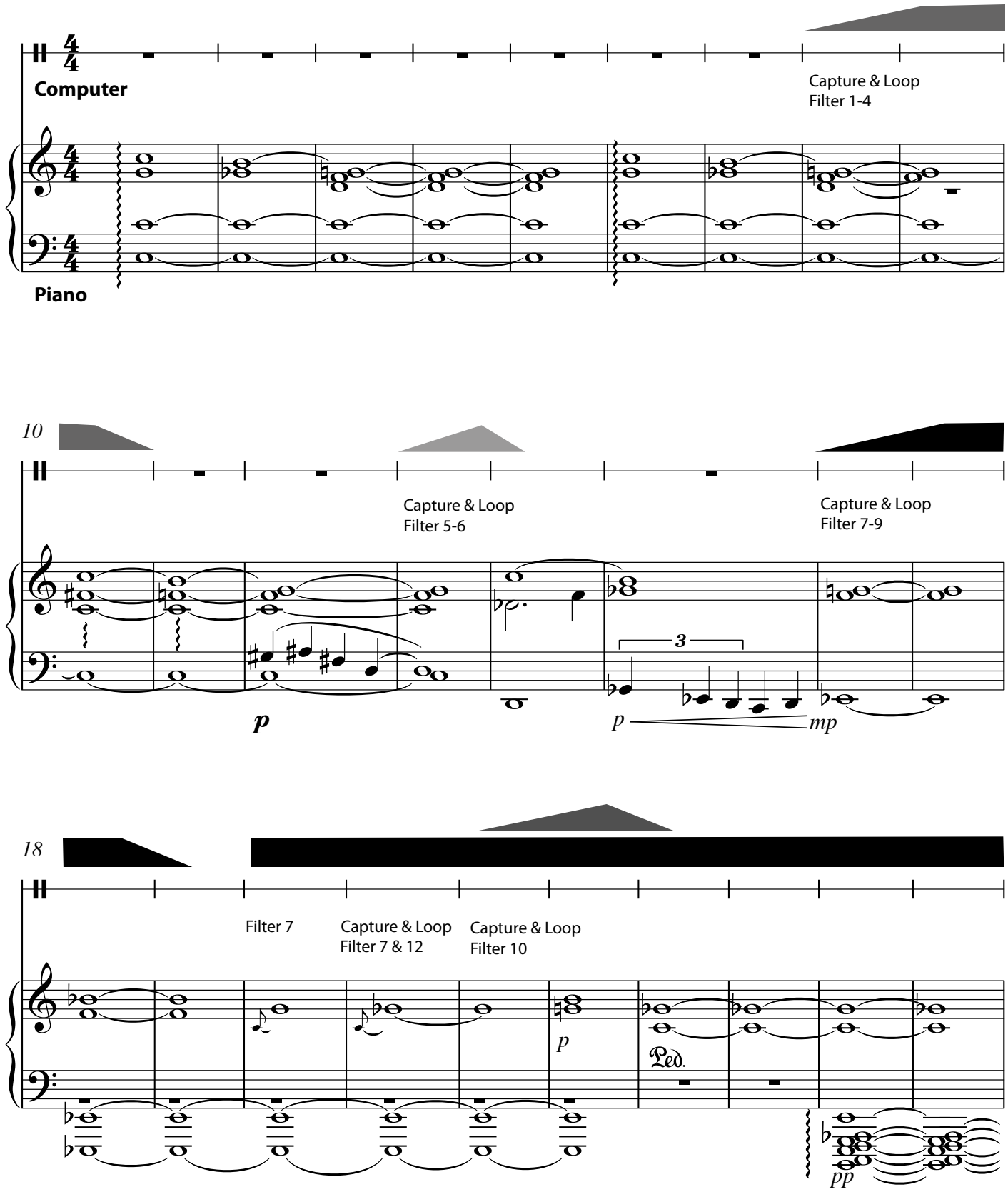
The application also affords the performer the ability to capture and loop the live audio and effect being input to the application. This looping feature can played alone or mixed in and effected with the live audio signal.
The third major function of the application is automated interpolation between presets based on volume levels of the live audio input.

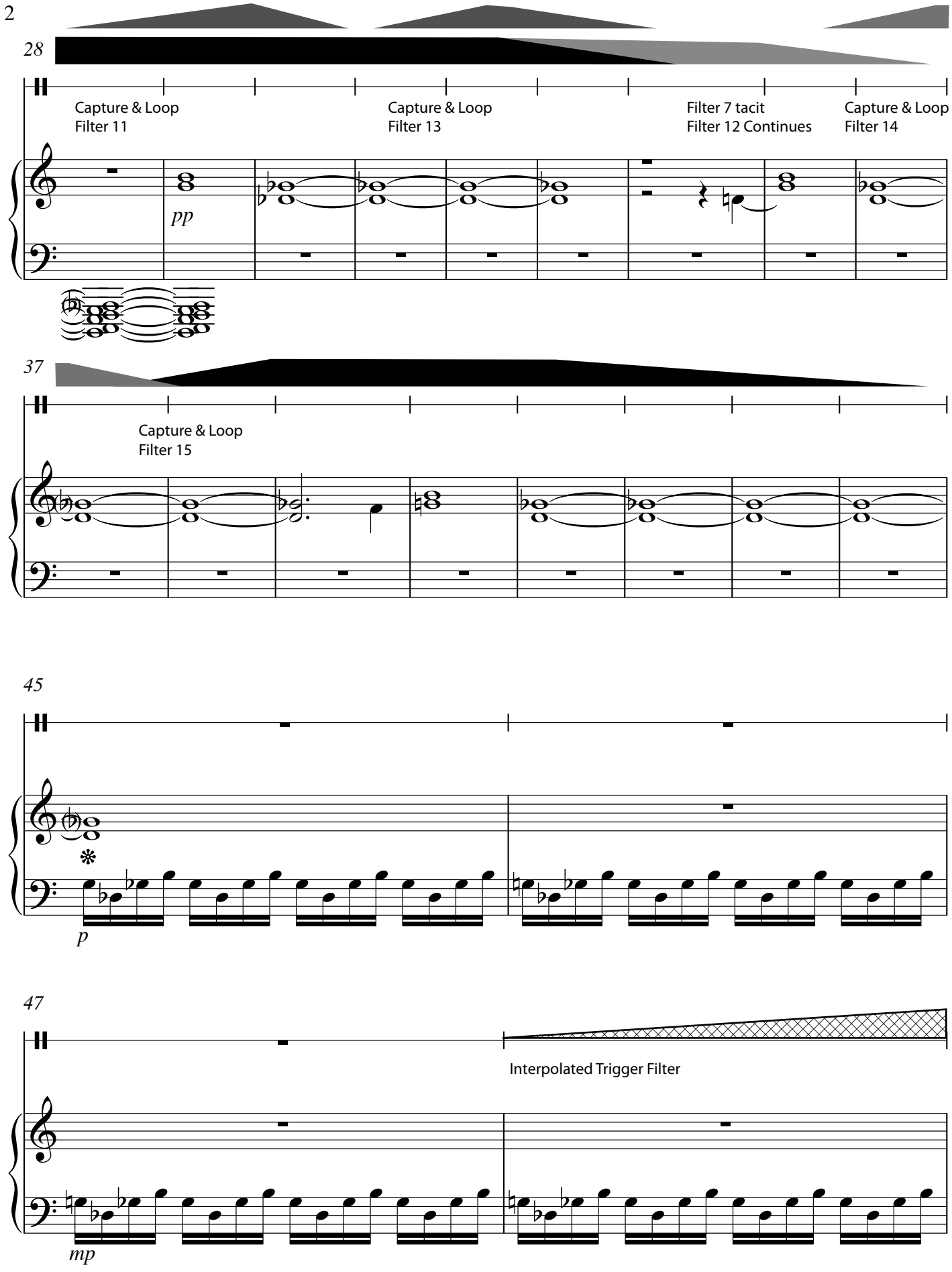
The recording included is a realization of the piano score with computer accompaniment.

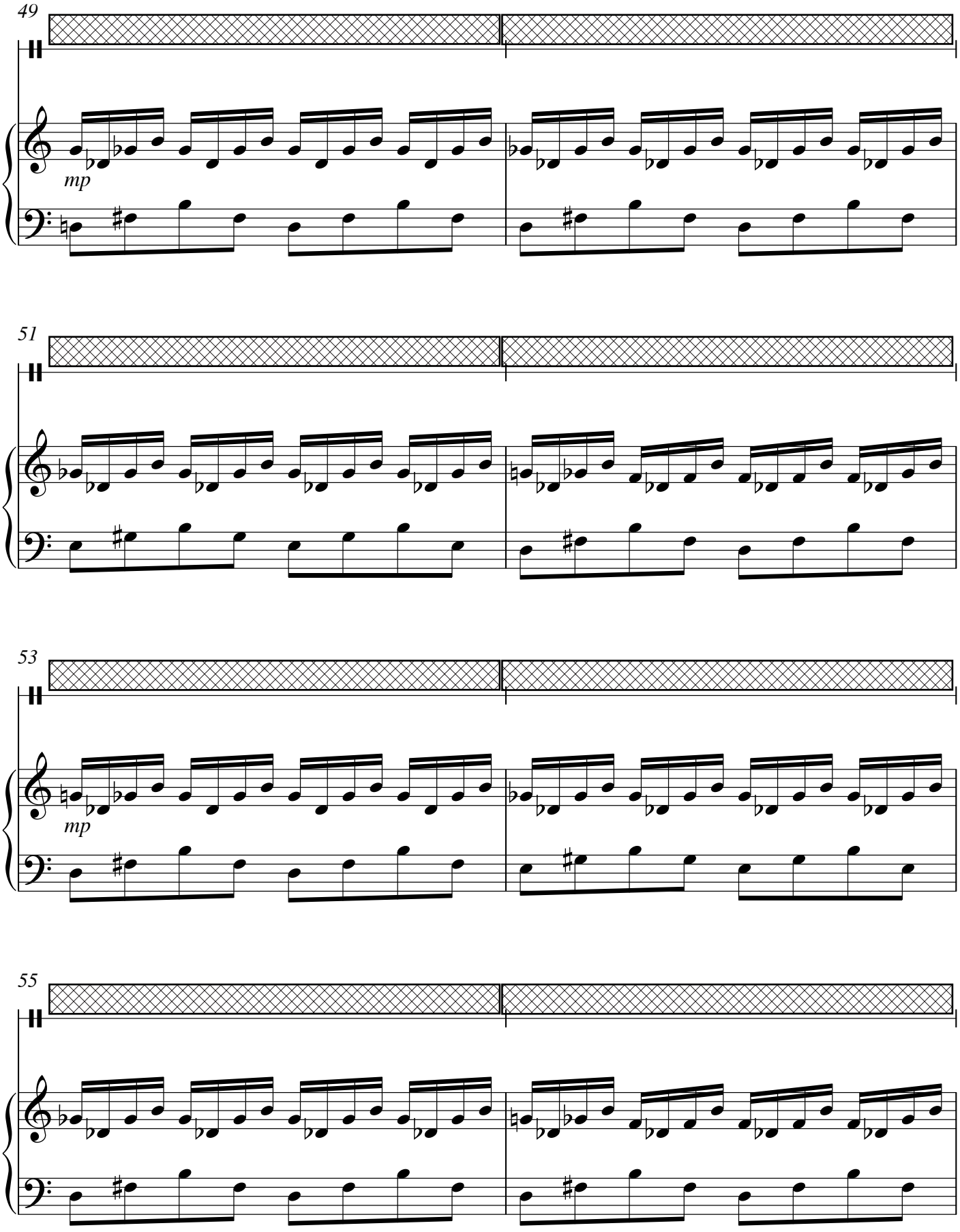
A complete score of the piece is also included.

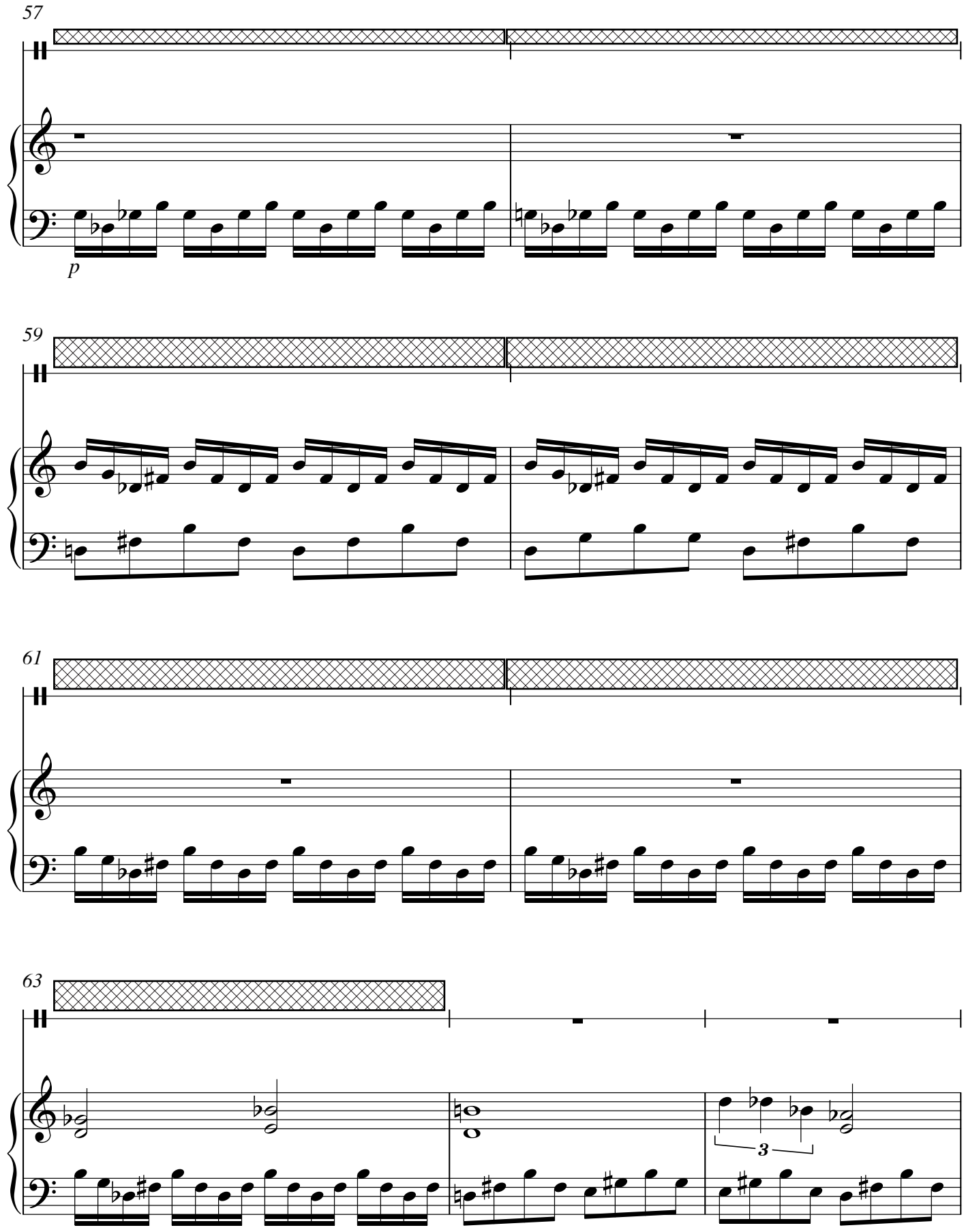
Intrusions

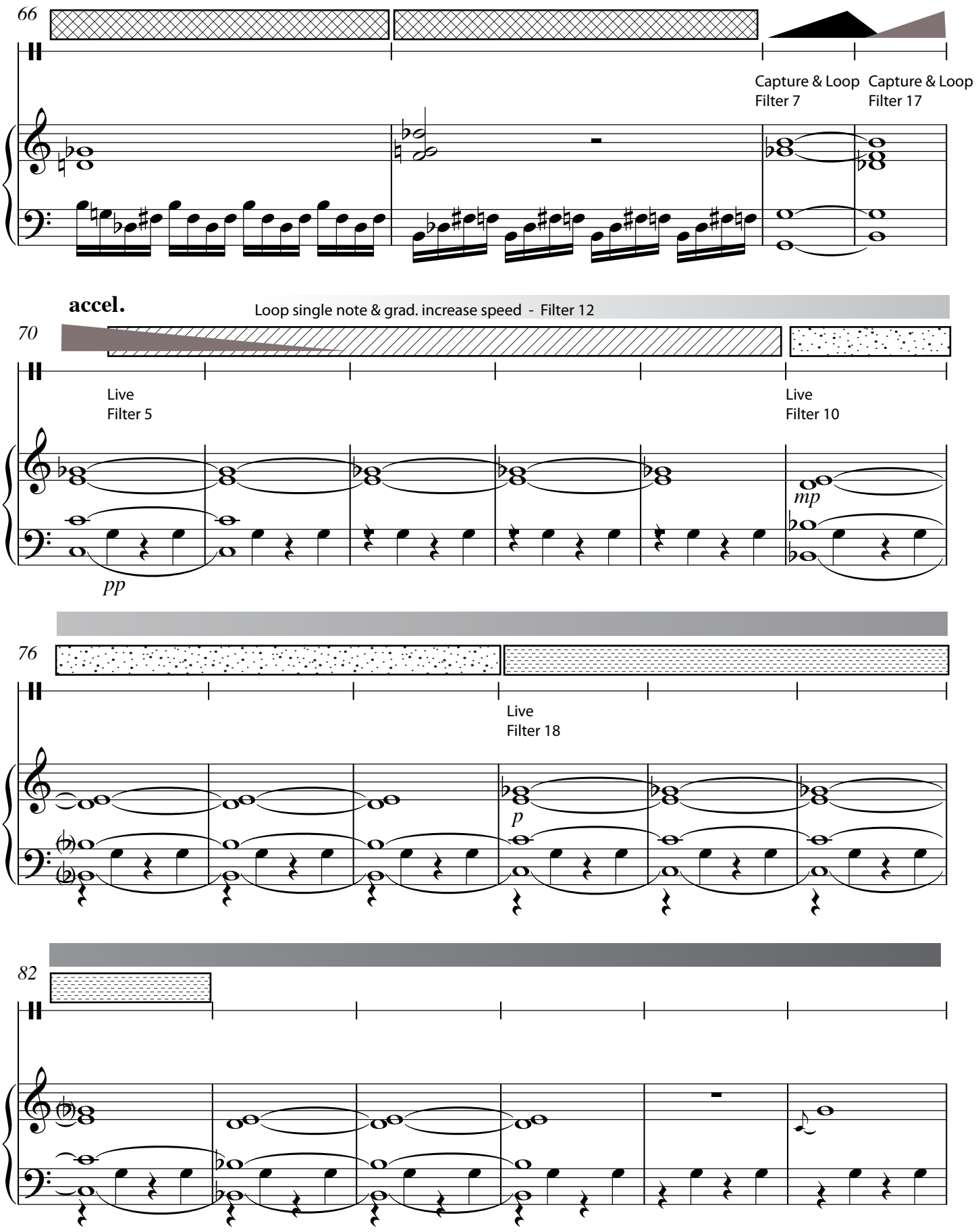
Joe Cantrell

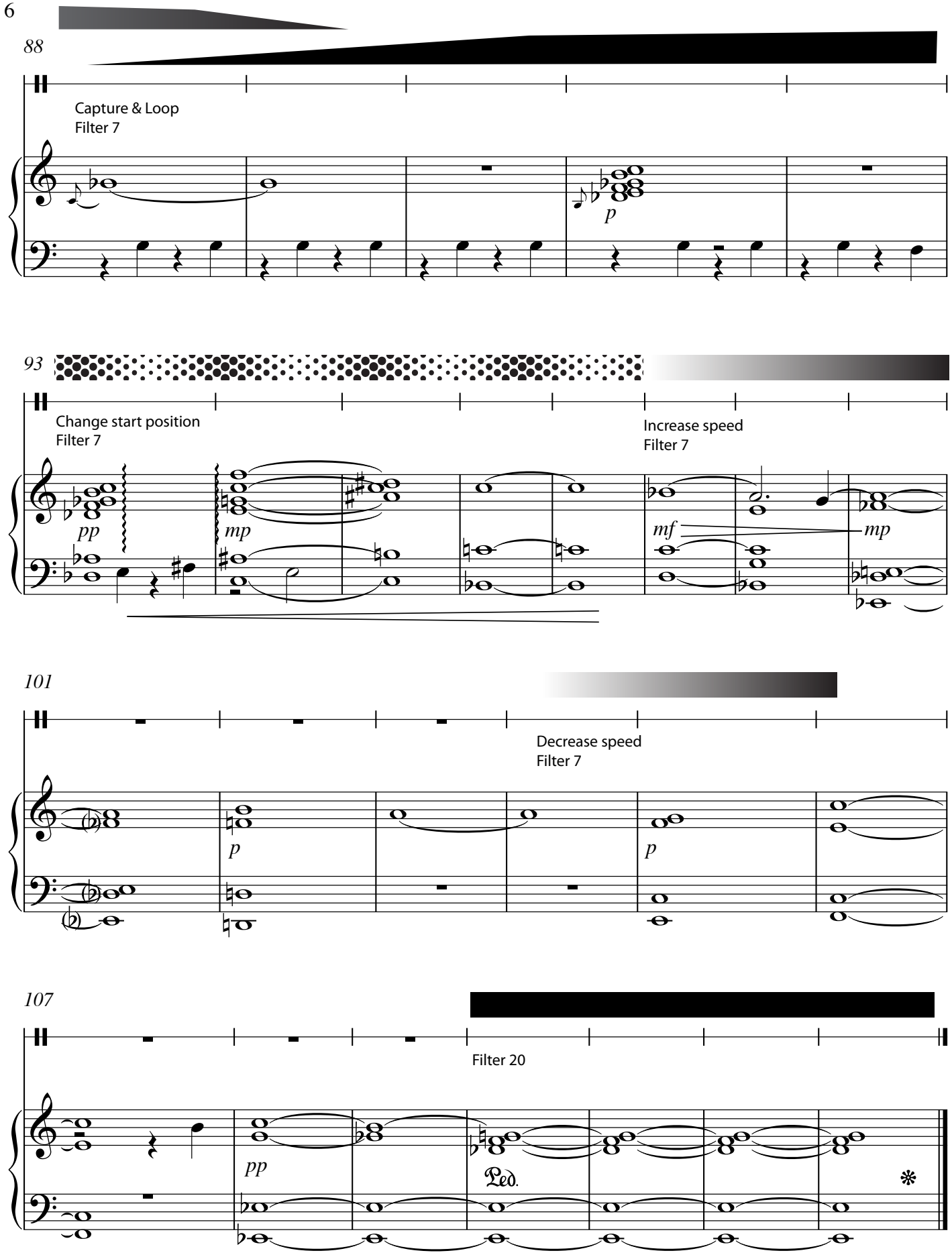



28
Capture & Loop
Filter 11
Capture & Loop
Filter 13
Filter 7 tacit
Filter 12 Continues
Capture & Loop
Filter 14
pp
37
Capture & Loop
Filter 15
45
p
47
Interpolated Trigger Filter
mp


49
mp
51
53
mp
55


57
p
59
61
63
3


66
Capture & Loop
Filter 7
Capture & Loop
Filter 17
accel.
Loop single note & grad. increase speed - Filter 12
70
Live
Filter 5
Live
Filter 10
pp
mp
76
Live
Filter 18
p
82


88
Capture & Loop
Filter 7
p
93
Change start position
Filter 7
Increase speed
Filter 7
pp
mp
mf
mp
101
Decrease speed
Filter 7
p
p
107
Filter 20
pp
Ped.
*