Preview File Only

Simon Emmerson

Arenas
(piano, brass quintet, electronics)
(2002-2003)

Commissioned by Philip Mead for performance with the brass quintet of the Royal Northern College of Music (directed by James Gourlay) in the BMIC 'Cutting Edge' series 2003

Score transposing (trumpets in Bb, horn in F)
Version 2.0 (September 2007)
Available as pdf for download: www.bmic.co.uk

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Arenas (piano, brass quintet, electronics)

Arenas is constructed from 25 basic sections (effectively 'moments' form), being 5 brass solos, 5 piano solos, 5 'quartets' ('jazz resonances') and 5 'quintets' ('colour-resonances') and 5 'antiphonies'. These may be rehearsed in these groups but the final score distributes these in a chosen sequence. While some hiatus is inevitable at some cross-overs the intention is a 'fast cross cut' between them. (the electronics will occasionally fade out beneath the new material).

Piano

The piano part requires knowledge of the 'attack pedal' techniques. The pedal starts depressed and switches 'off-on' with the attack on the keyboard. The aim is to capture a ghostly resonance. The third pedal is also used to sustain pitches for resonance.

'Quintets (colours-resonances)'

(above the stave) means tonguings (t, d etc.) at a high speed repetitive rate for the number indicated (accuracy is not essential).

The long held notes may be broken for breath with minimum re-attack. The sound quality should move from wind noise blown through the instrument (indicated as 'x' instead of notehead) through pitched noise (not specifically notated) to pitch proper.

Timing is relative; no durations are crucial and these sections should 'drift' along without pulse or metre.

Vowels are referred to in the score. All brass instruments can influence their sound through the formation of clear (even exaggerated) vowel shapes in the mouth. This is used in conjunction with plunger mute in several 'quintets'.

'Quartets (jazz resonances)'

These sections move slowly towards a kind of 'free jazz' association. The accented downbeats ('sfz') and associated resonances) should be clearly marked; the additional 'mf' notes and groups are notated in roughly proportional space-time and may be played freely in roughly the time indicated.

There is therefore a 'backbone' which is strictly metric (accented notes); downbeats are important but the subsequent 'doodle' groups start on these downbeats and are played 'as fast as clearly possible'. Thus some bars are indicated as 2+3+2 eighth notes. On the 1st, 3rd, 6th 'beats' entries occur but other material is not so important. Notes marked 'mf' are freely placed within a kind of 'space-time' notation and should not be synchronised (except by chance).

'ddl' = doodle: a jazz technique in origin. Pitches are roughly indicated; while the exact pitches need not be kept to the overall shape should be followed.

'Antiphonies'

The 'antiphonies' contrast several kinds of hocket and fanfare between brass instruments in groups of two 'against' three, and between them and the piano.

Brass Solos

Once during the course of the work each brass instrument moves forward to a position by the piano to allow maximum projection of their sound into it. The piano sustain pedal is depressed and the resonance is amplified. The use of the voice with playing is required in the solos. Performers should ideally memorise their solo part. They are completely free in tempo and duration but are intended to be virtuosic cadenzas.

Mutes

In several moments the exact mute type has not been defined and will be finalised in rehearsal, although the definitions of where the mute might be used are inserted. Harmon, straight and plunger are demanded for the trumpets.

'Standard' notation

Accidentals apply to the note and subsequent repetitions (and within tremolos).

Note groups with a strike through ('grace notes') should be played fast but not so fast as to lose articulation and clarity. When placed in a bar without detailed rests, these should be played freely at roughly the time point indicated. Sometimes the start point of these groups is strictly defined, but they need not be 'in tempo'.

Live electronics

The electronics do not influence the performers actions, but project the sound with echoes and sustains at certain key points. Each brass instrument has a single microphone, the piano at least two for good projection of the sympathetic resonances. Details follow.

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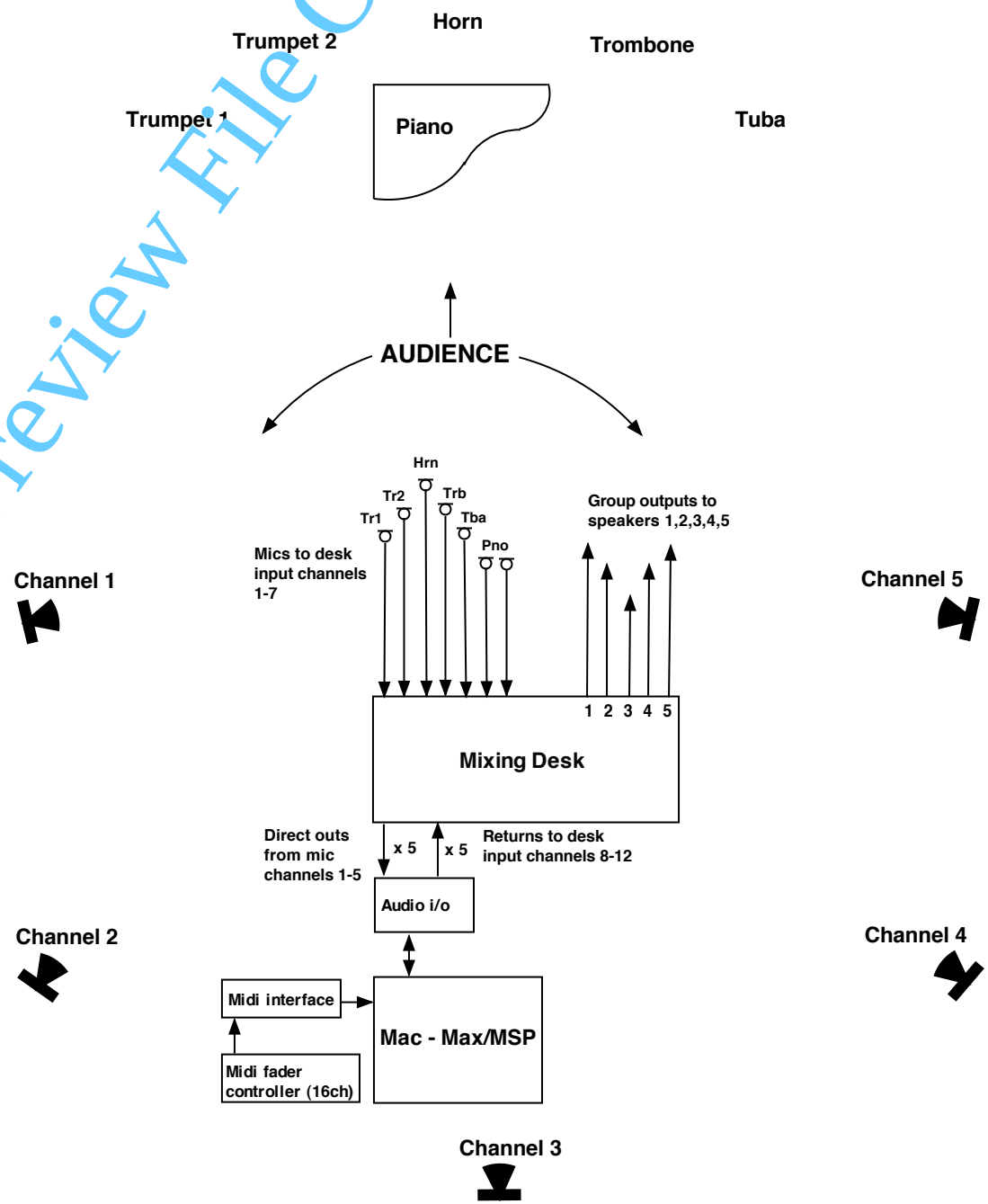
ARENA - layout and basic circuit



Set-up (Midi controller)

The Midi controller (such as a Peavey PC 1600) should be reprogrammed such that faders 1-16 output Controller no.s 1-16 on Midi channel 1.

Combined with the Max/MSP patch -

Fader 1 controls input level from Trumpet 1
Fader 2 controls input level from Trumpet 2
Fader 3 controls input level from Horn
Fader 4 controls input level from Trombone
Fader 5 controls input level from Tuba

Fader 6 controls global input level to SUSDELAY process
Fader 7 controls global input level to DELSEQ process
Fader 8 controls global input level to REVSUSTAIN process

Fader 9 controls feedback level in SUSDELAY process
Fader 10 controls feedback level in DELSEQ process

Fader 14 controls global output from SUSDELAY process
Fader 15 controls global output from DELSEQ process
Fader 16 controls global output from REVSUSTAIN process

In the notes below 'fader down' indicates to the bottom of its trajectory, 'fader up' indicates to the suitable maximum established in rehearsal (not necessarily 100%).

Set up (microphones and amplification)

Each instrumental microphone is directed to an individual loudspeaker and in addition (split) to a discrete input channel to Max/MSP (see diagram).
At the mixing desk:
Trumpet 1 is routed to loudspeaker 1; Trumpet 2 to loudspeaker 2; Horn to loudspeaker 3; Trombone to loudspeaker 4; Tuba to loudspeaker 5.
The two mic.s for piano amplification should be distributed across the 5 outputs/loudspeakers (logical stereo is not as important as general sound balance).
Max/MSP return channels 1-5 are directed to loudspeakers 1-5 respectively.

In rehearsal all levels should be checked and set; ideally the direct sound and loudspeaker sound should be adjusted to give the audience a balanced 'surround sound' feel. In each solo instrumental cadenza the player plays into the piano (with sustain pedal down for the duration). Only the piano amplification is therefore effective.

Performing the Midi controller

Indications in the score refer to Midi faders (not main mixing desk faders).

Only one (or no) process is used in each movement. This is indicated at the head of each movement. First an indication of any previous movement's active fader to be brought down, then the new process and the fader to be brought up, then an indication as to whether all instrumental input faders (1-5) are up ('A') or whether they should all start down and individual instrumental sound be captured ('X') e.g.:

⑦ DOWN - REVSUSTAIN ⑧ UP Ⓧ
Fader 7 down; then fader 8 (for REVSUSTAIN input) up; faders 1-5 down – prepare to capture individual sounds (see below)!

SUSDELAY ⑥ UP Ⓐ
No previous active process; fader 6 (for SUSDELAY input) up; faders 1-5 up (constant through movement).

⑥ DOWN - NO TREATMENTS Ⓧ
Fader 6 down; no treatments; bring faders 1-5 down in preparation for the next 'active process' movement which will have capture (this will be repeated at the head of that movement).

DELSEQ ⑦ UP Ⓧ
No previous active process; fader 7 (for DELSEQ input) up; faders 1-5 down – prepare to capture individual sounds (see below)!

In the final quintet movement (no. 24) the feedback is increased steadily to approaching 100% which effectively freezes the sound. The *output* of this is faded out slowly over the first few bars of the final piano solo (no. 25), then faded back in (at a low level) over the last few bars as indicated, the whole sound fading together to conclude.

'Capturing' individual instrumental sounds

In several movements that use REVSUSTAIN and DELSEQ, individual events are to be captured using a simple fader gesture (on faders 1-5). There are two kinds of events to capture:
- a short attack: the fader fast 'up' to anticipate the attack by a short instant and 'down' very soon after it.
- a smooth capture from a sustained sound: a continuous 'bell shaped' motion (duration judged by context but not 'too long' – designed to produce a 'seemless sustain' from the processing).

Which type of event is self-evident from the score context:

① ② ③ ④ ⑤

are placed above or below the stave just before the short attack or just at the start of the sustained sound, indicating the fader for that instrument.

Faders 1-5 are brought fully down just before the start of these movements (indicated in the score by Ⓧ). Other movements where all faders 1-5 are all up are indicated by Ⓐ.

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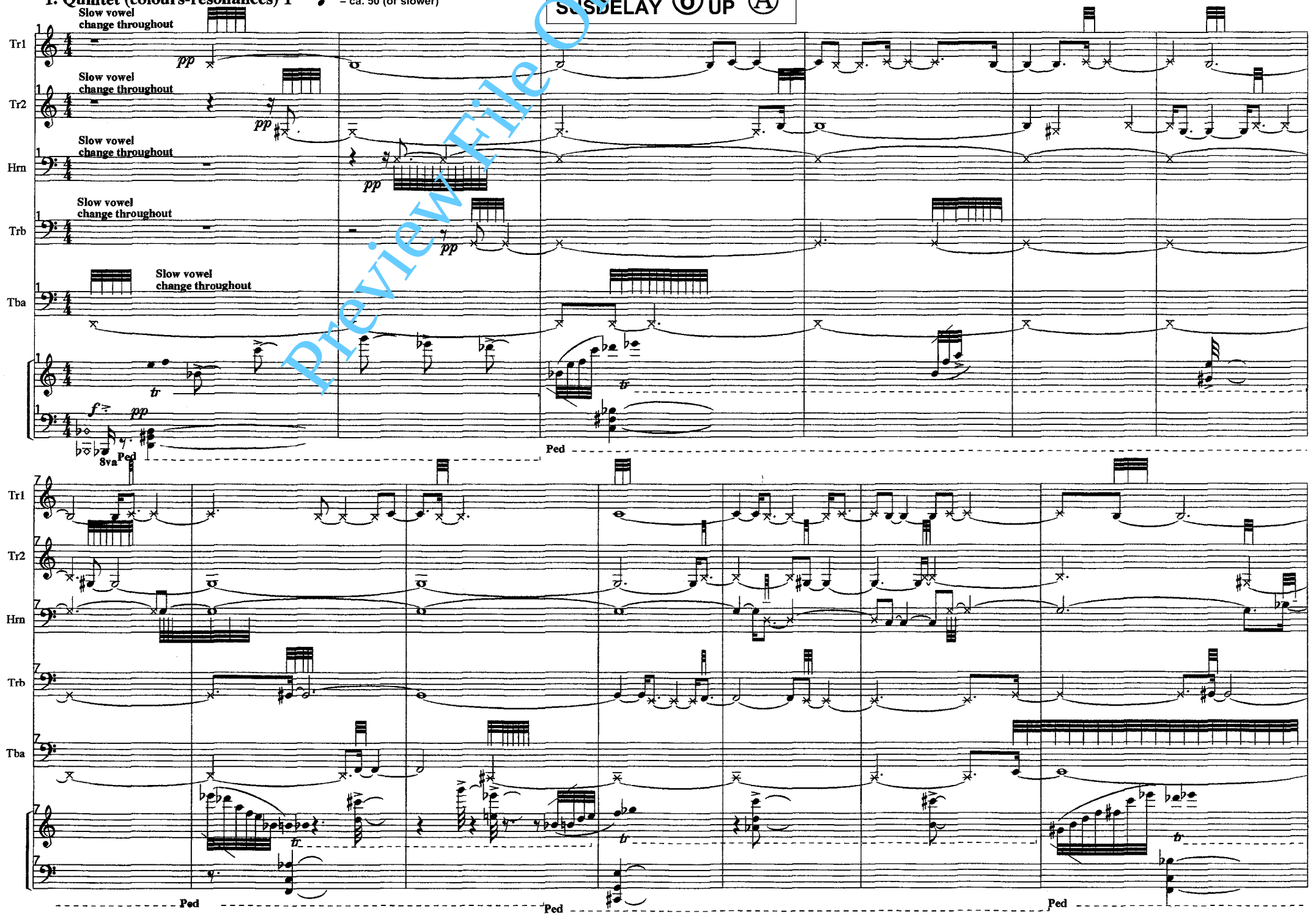
1. Quintet (colours-resonances) 1

♩ = ca. 50 (or slower)

SUSDELAY ⑥ UP Ⓐ



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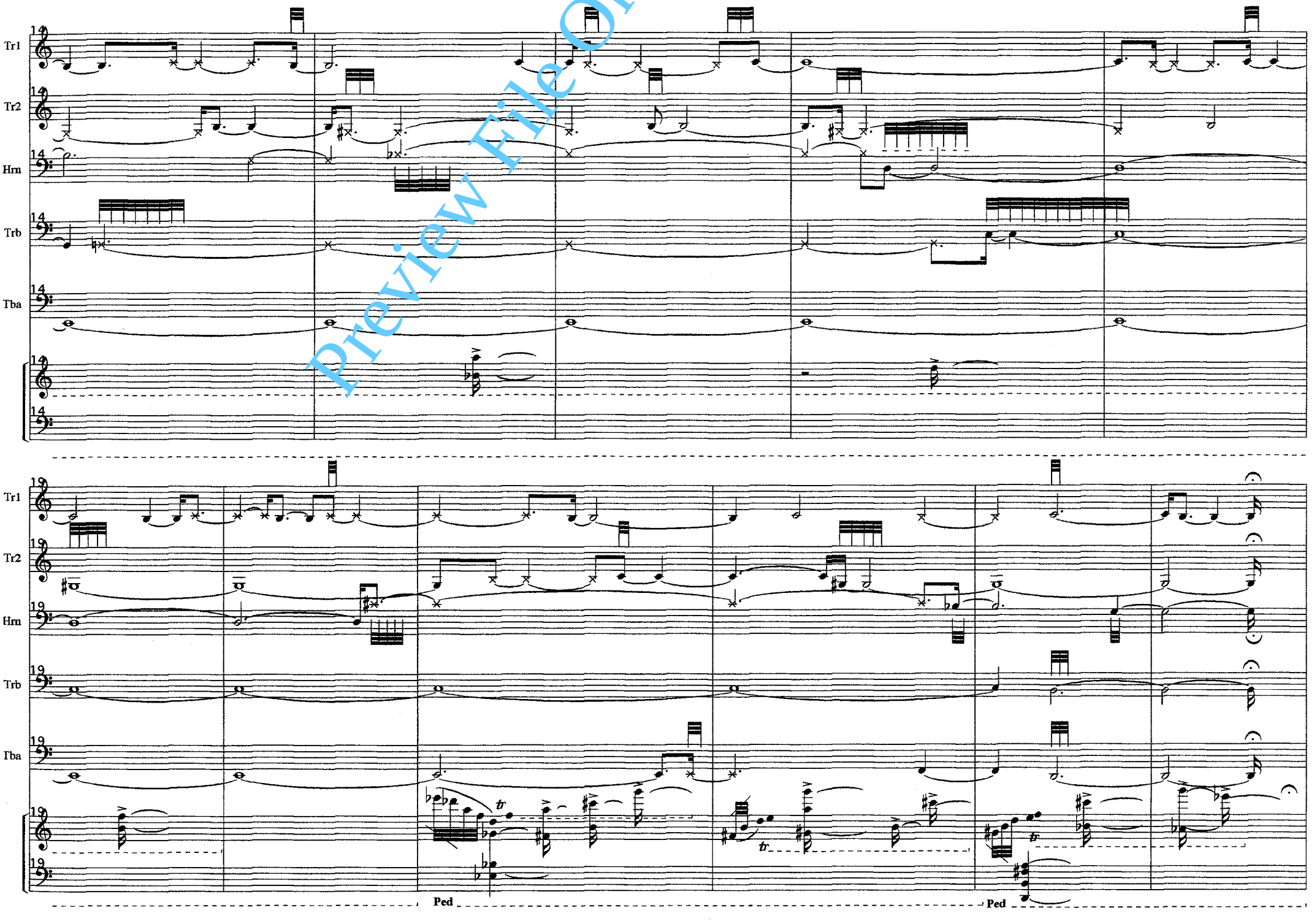
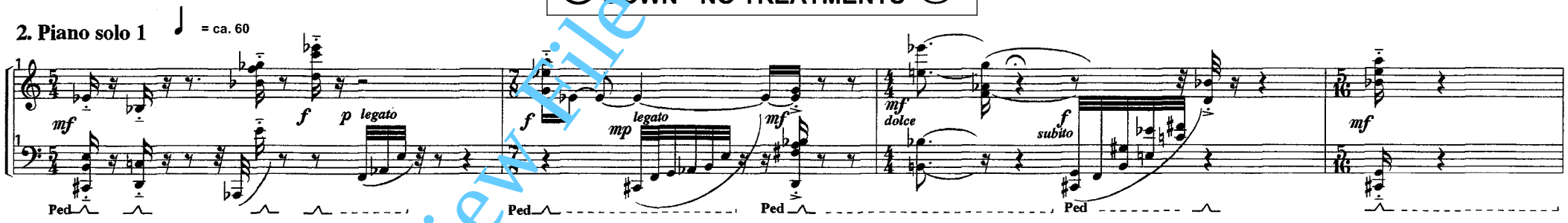


⑥ DOWN - NO TREATMENTS Ⓧ

2. Piano solo 1



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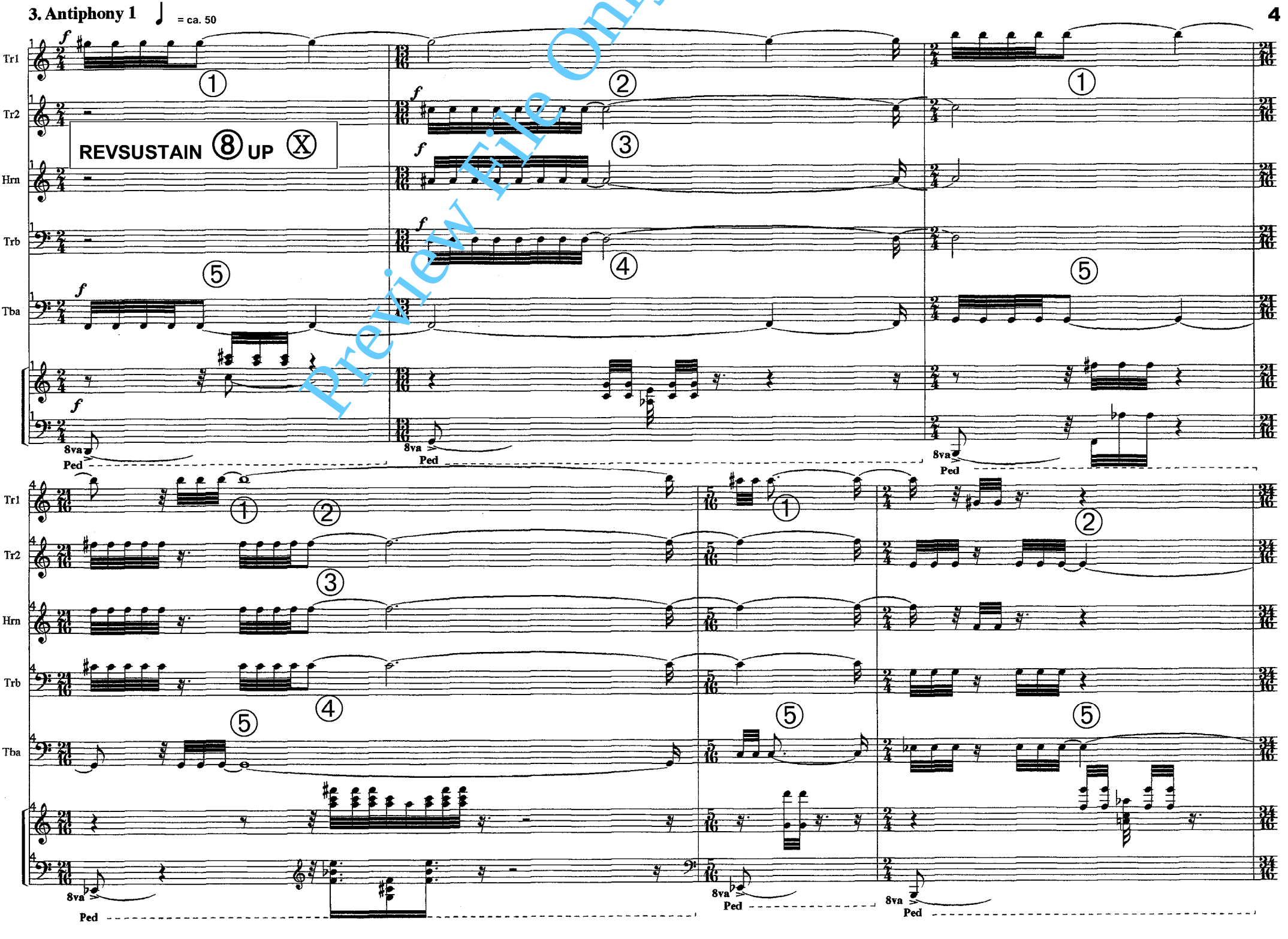

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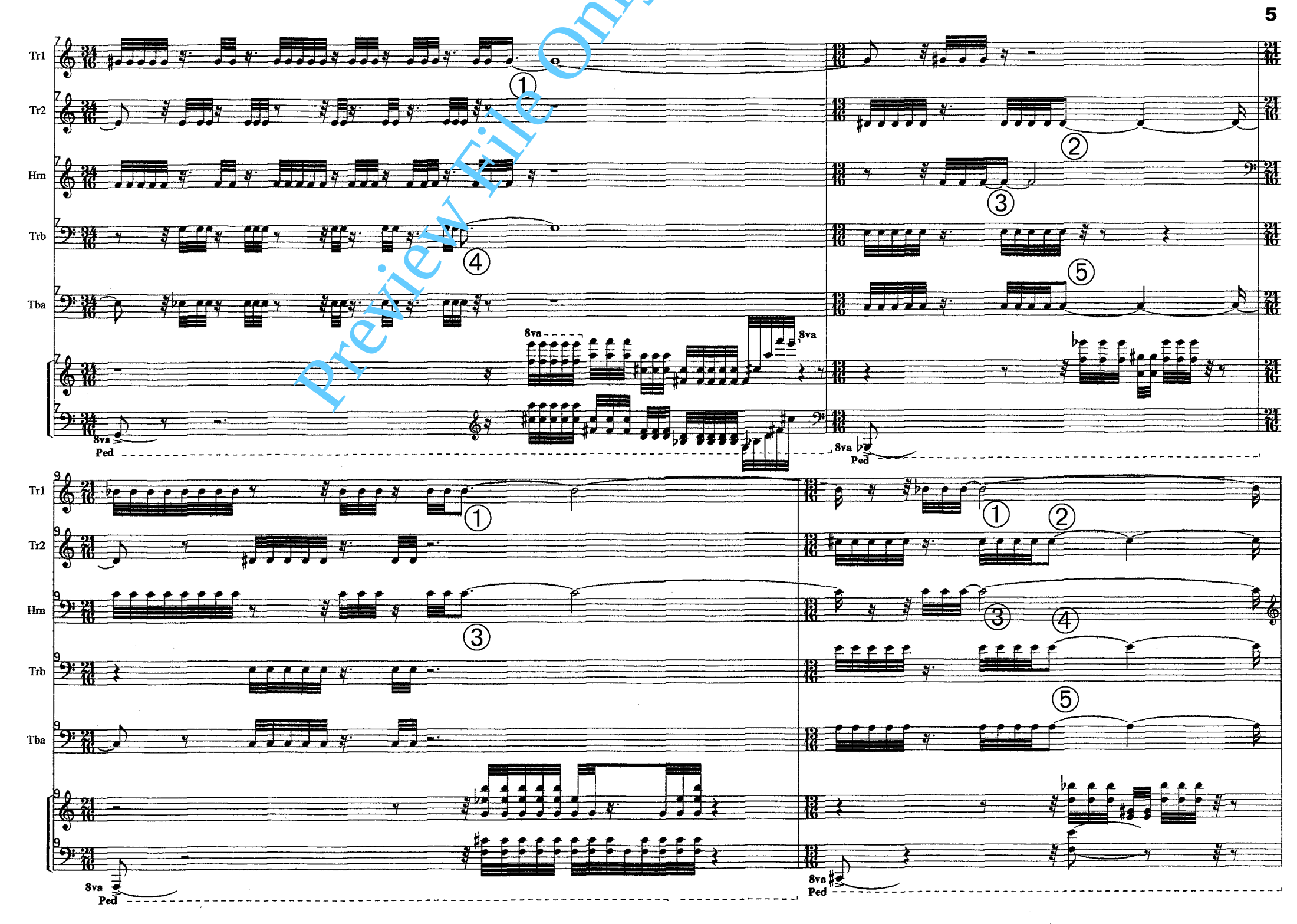

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4. Quartet (jazz resonance) 1 ♩ = ca. 60 (or faster)

⑧ DOWN - NO TREATMENTS Ⓐ

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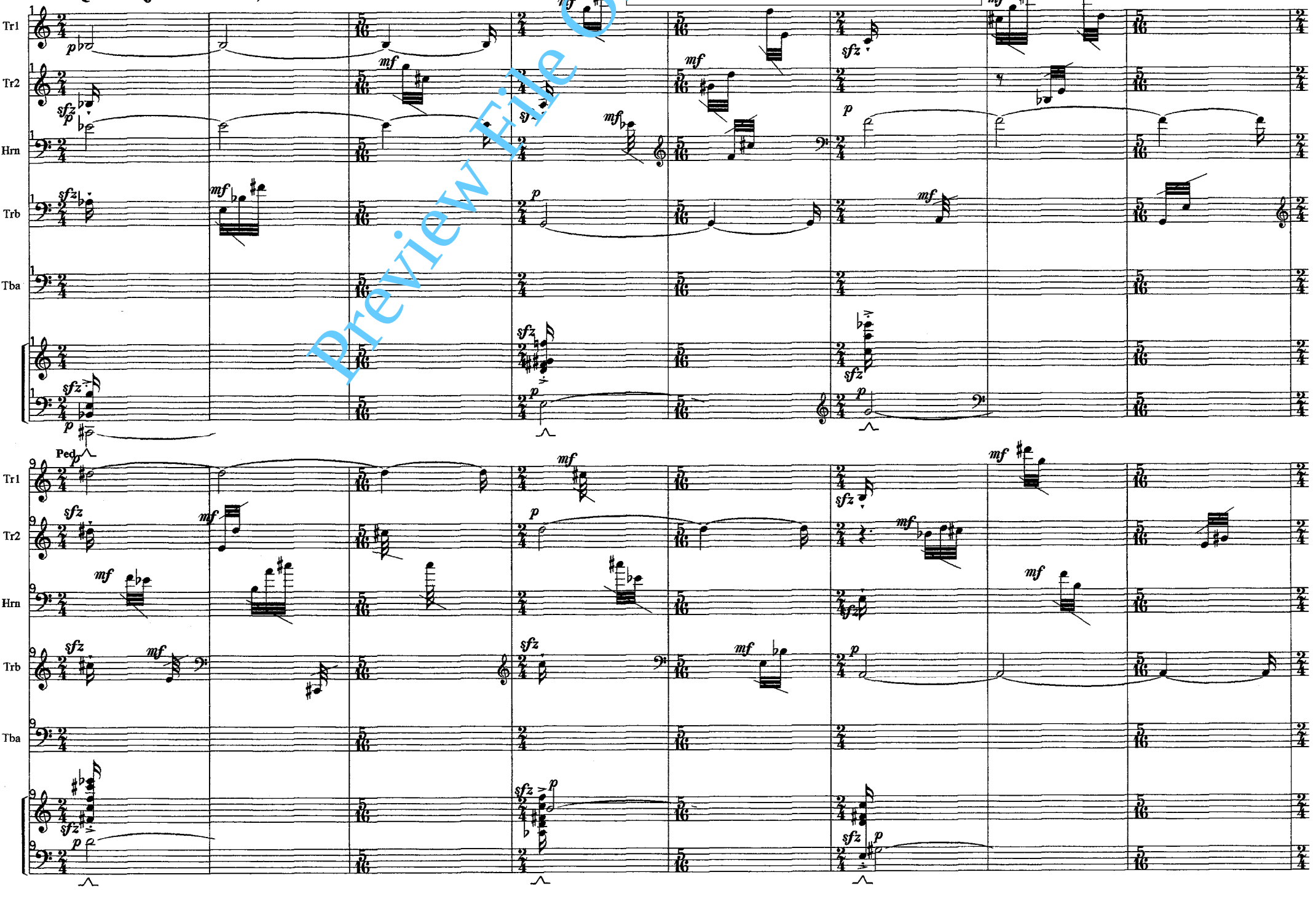

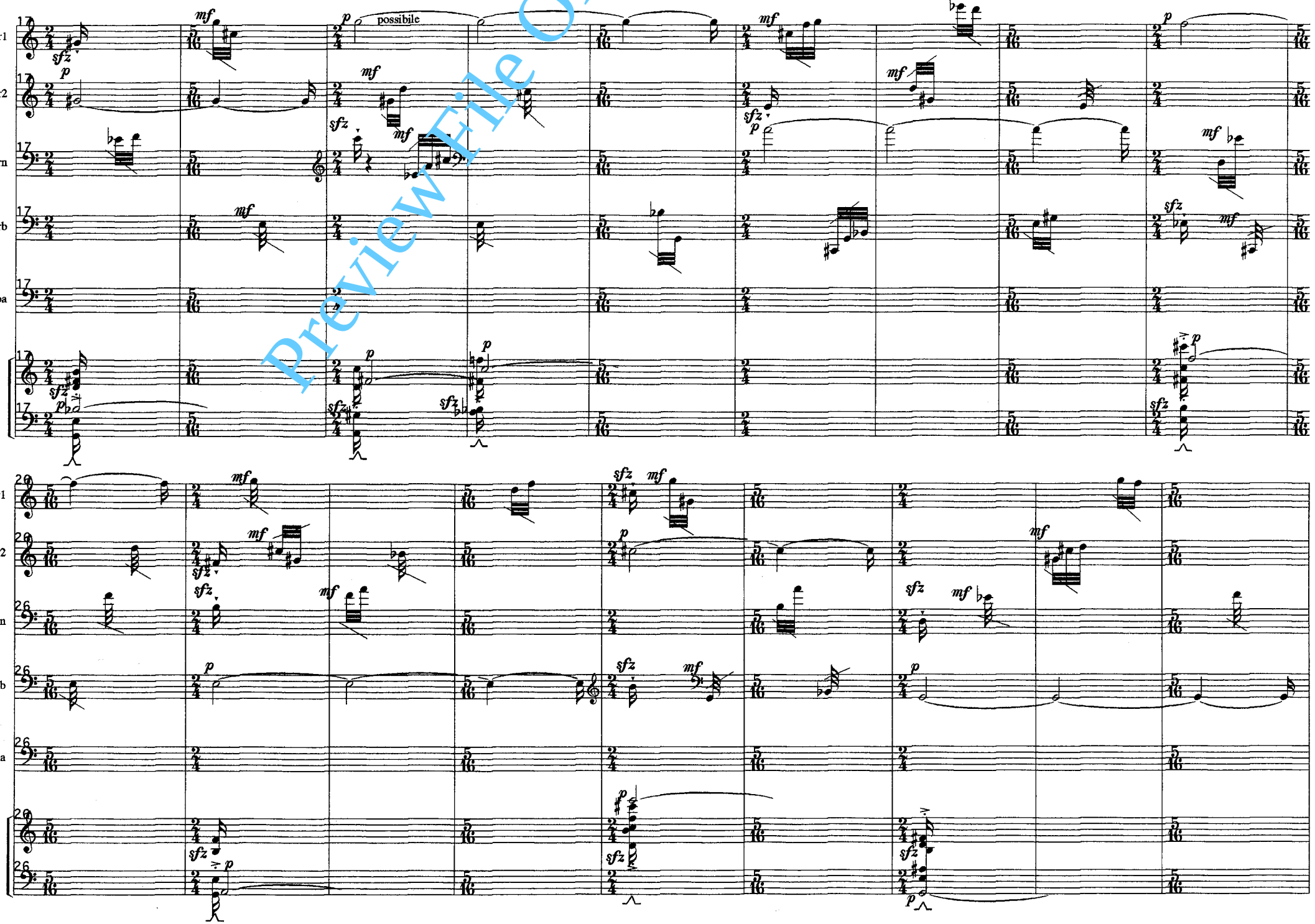

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♩ = ca. 50 (or slower)

SUSDELAY GROUP A

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Tr1

Slow vowel and plunger changes throughout

Tr2

Slow vowel and plunger changes throughout

Hrn

Slow vowel and hand mute changes throughout

Trb

Slow vowel and plunger changes throughout

Tba

Slow vowel changes throughout

8va

Ped

Ped

Tr1

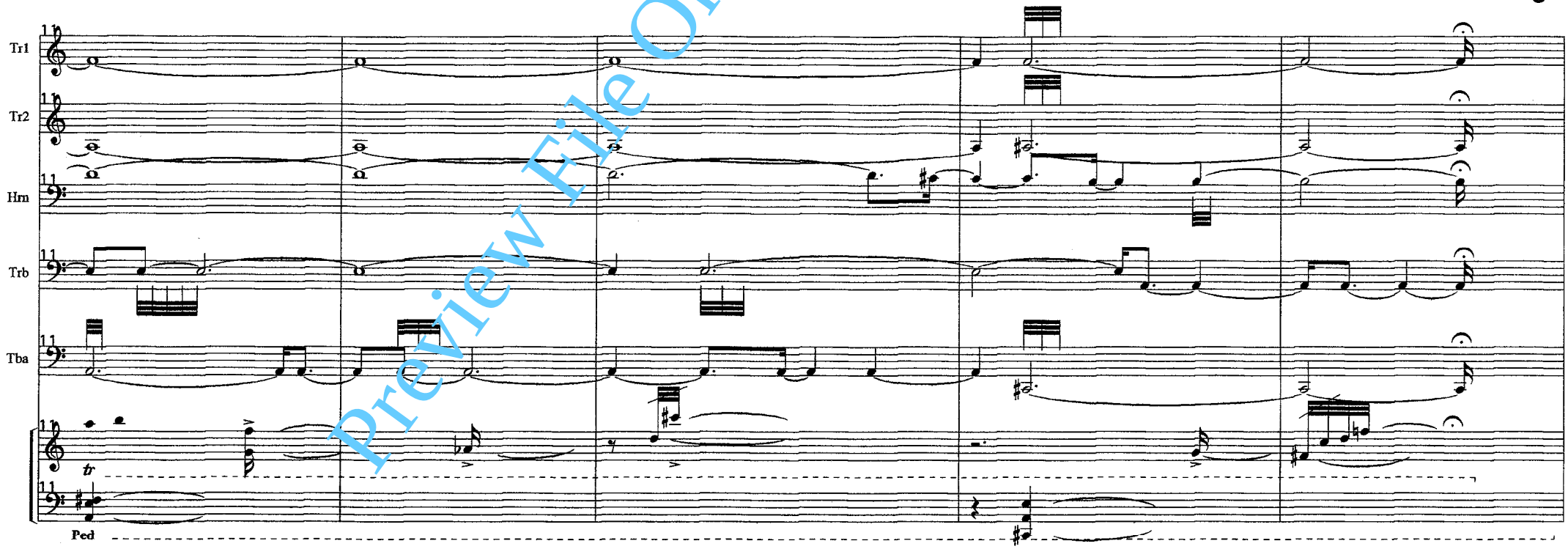
Tr2

Hrn

Trb

Tba

Ped



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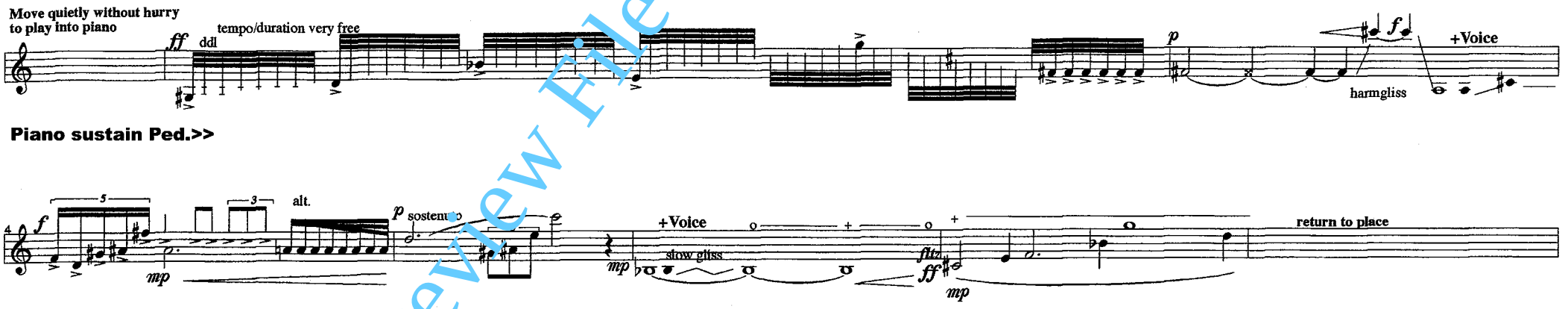
6. Trumpet 2 solo

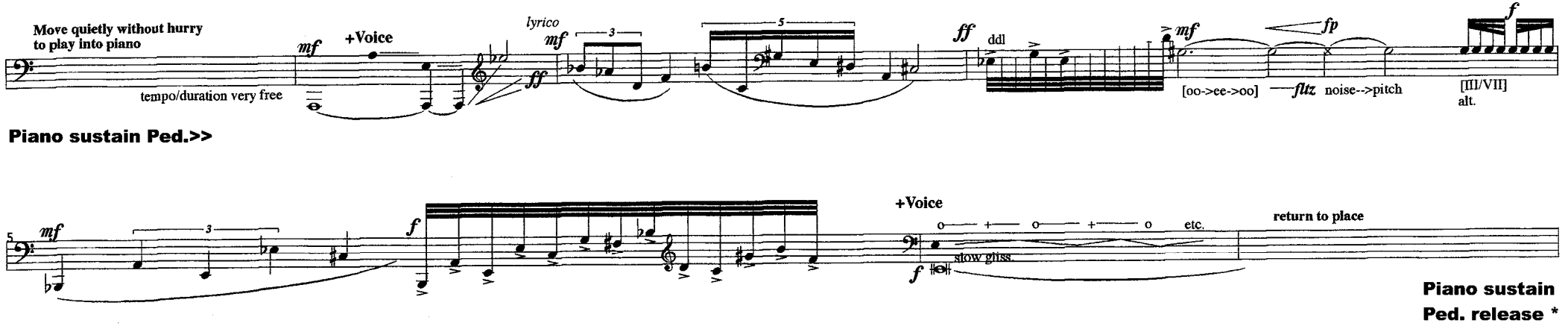
⑥ DOWN - NO TREATMENTS Ⓧ

[Amplified piano resonance]



7. Trombone solo

[Amplified piano resonance]



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8. Quartet (jazz resonance) 2

♩ = ca. 60 (or faster)

NO TREATMENTS ⓧ

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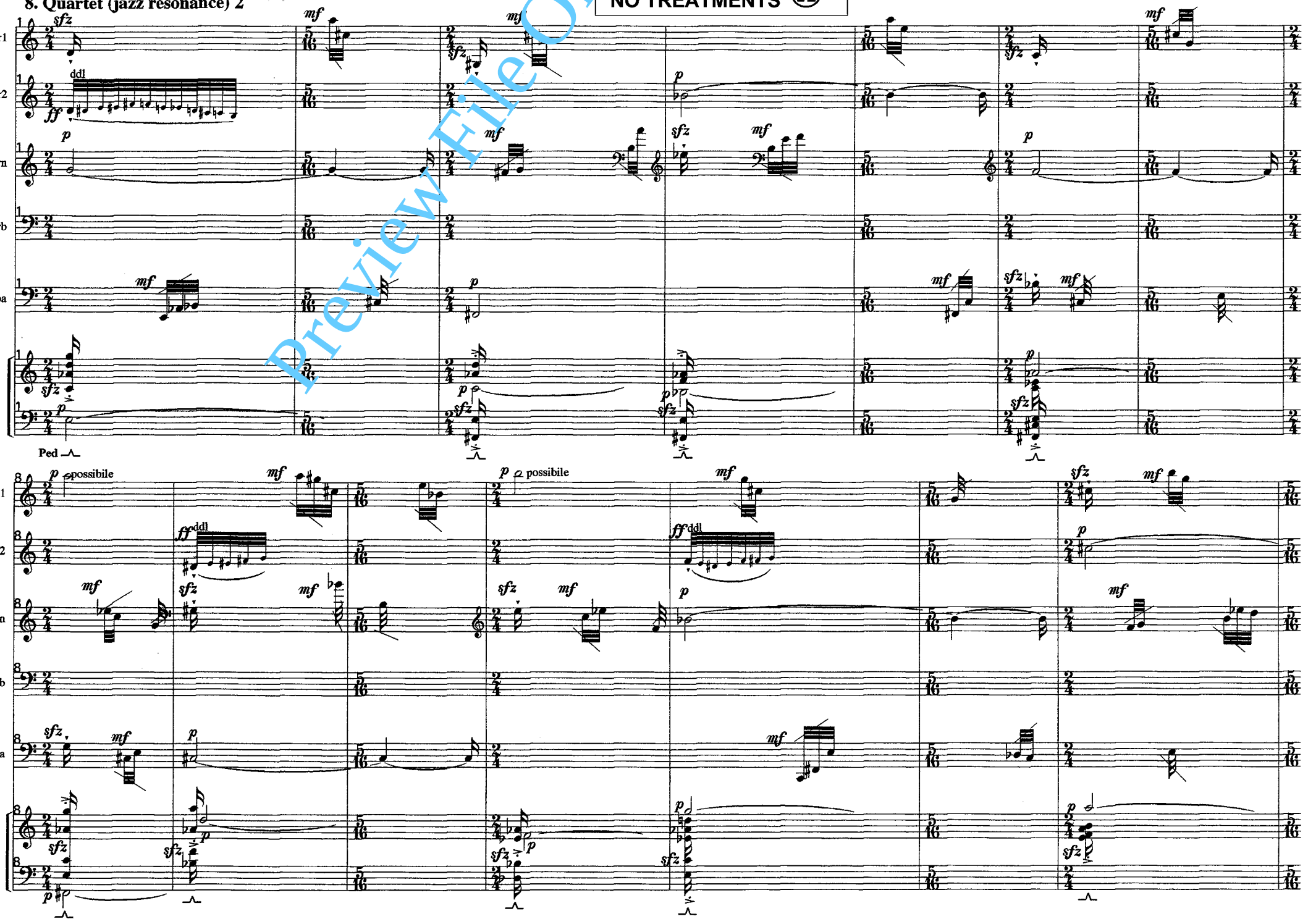

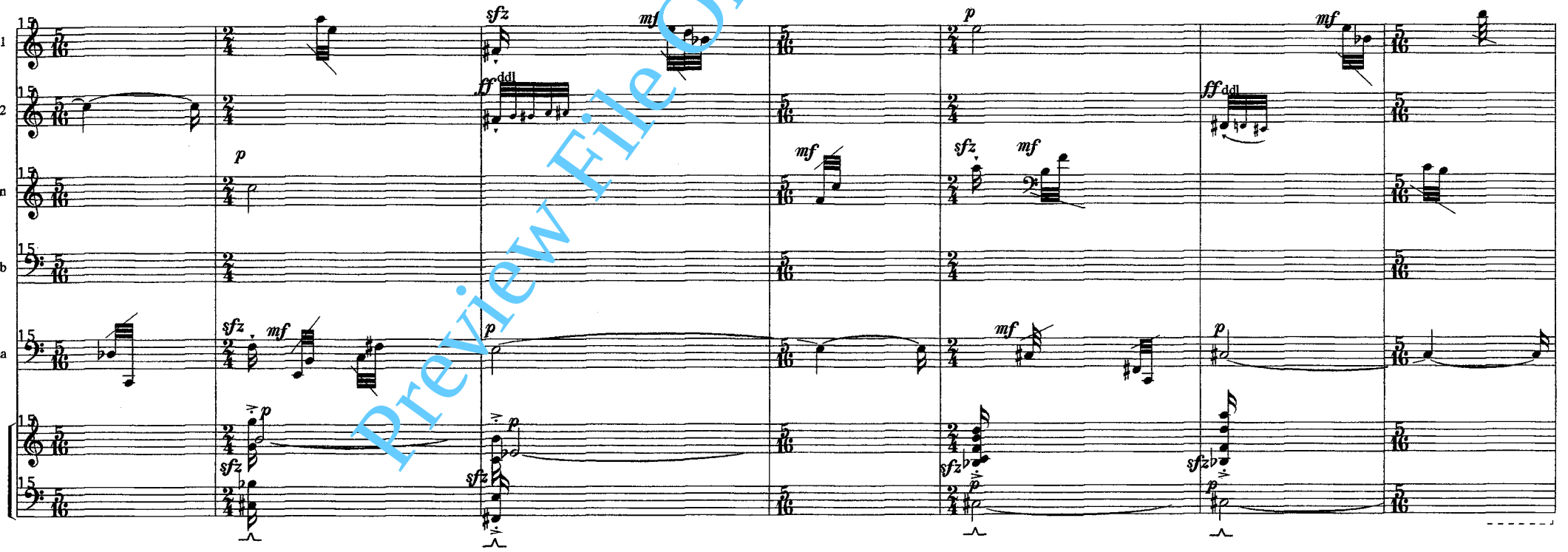

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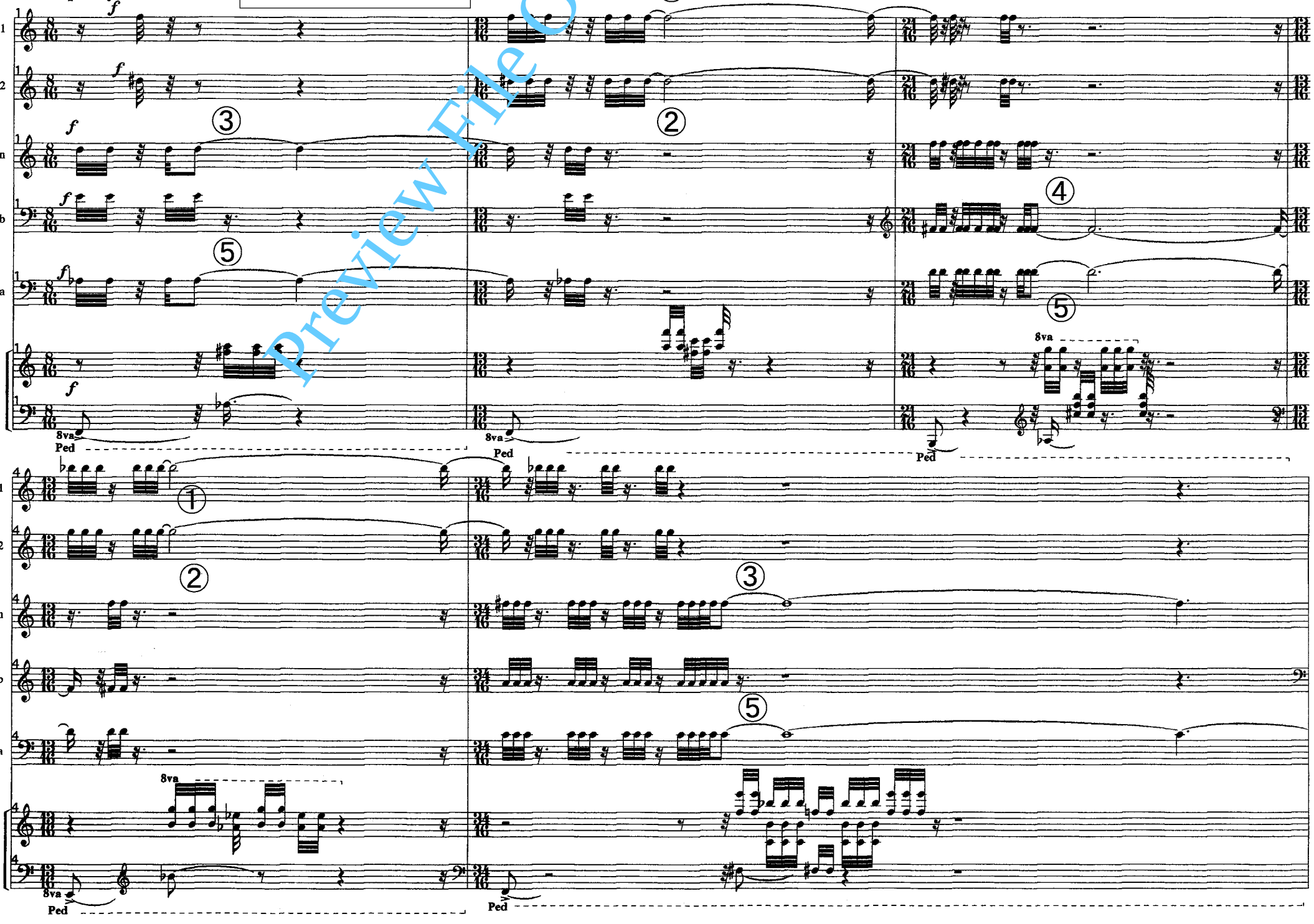
9. Antiphony 2

♩ = ca. 50

DELSEQ ⑦ UP ⓧ



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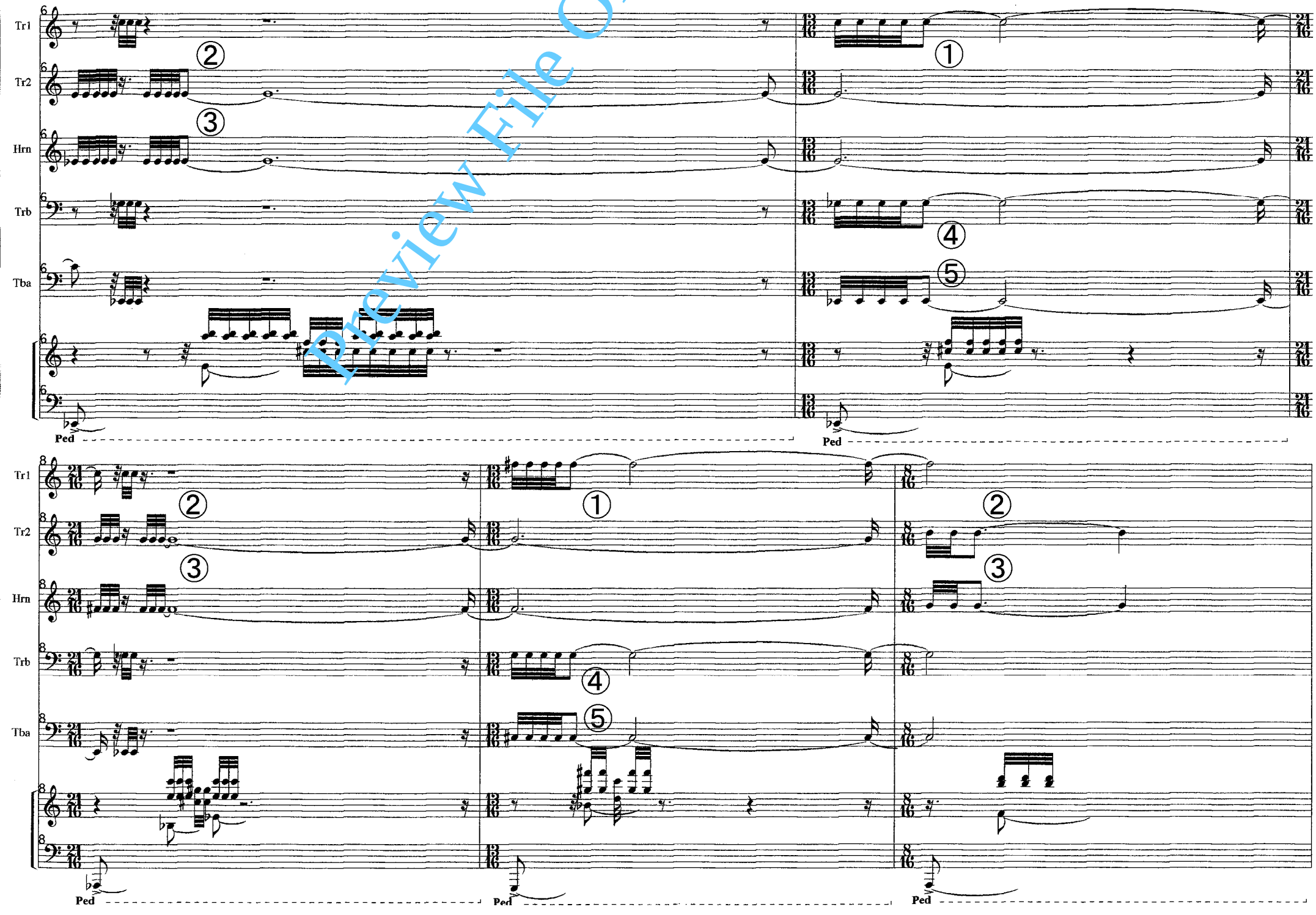

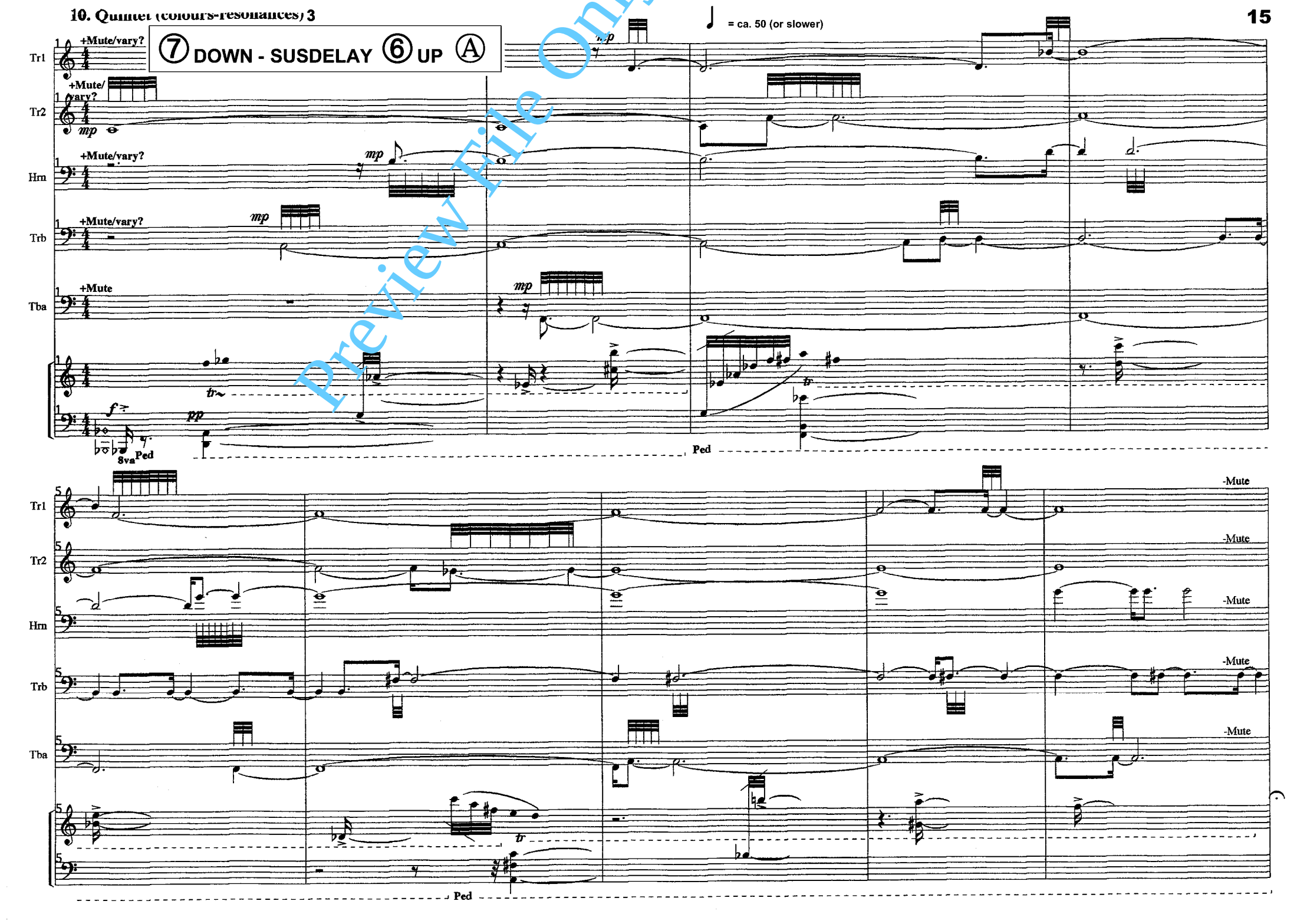

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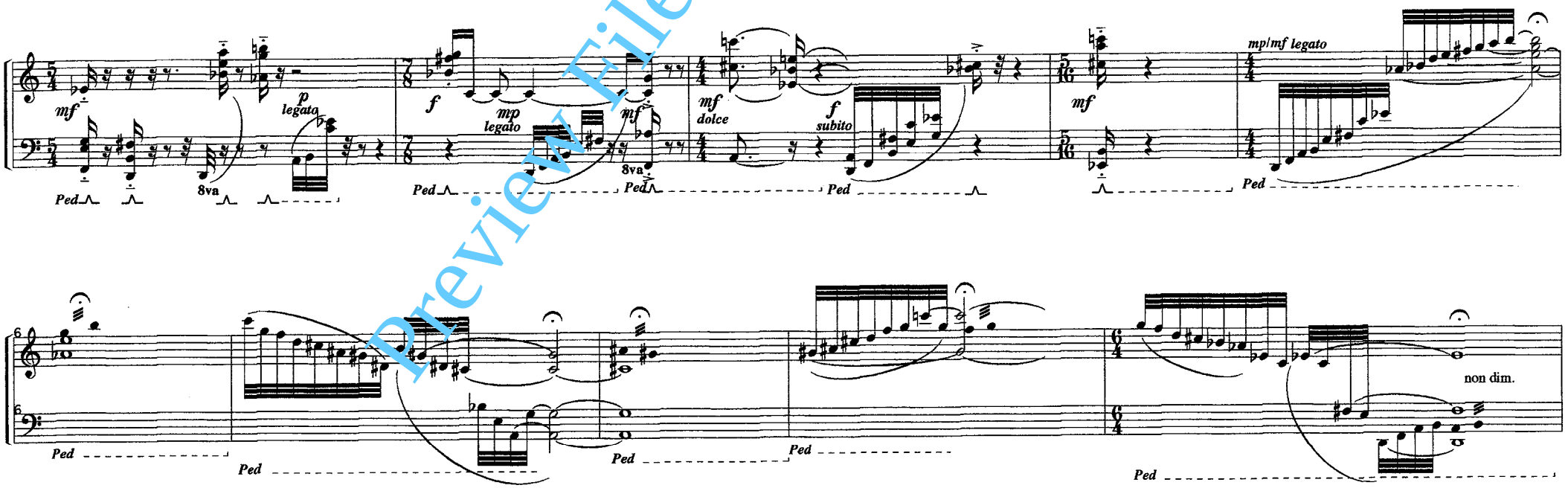
11. Piano Solo 2 ♩ = ca. 60

⑥ DOWN - NO TREATMENTS Ⓧ



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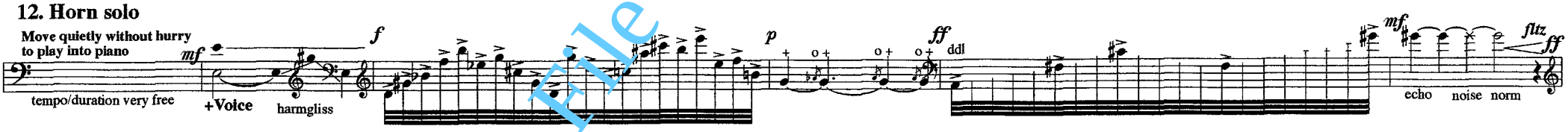
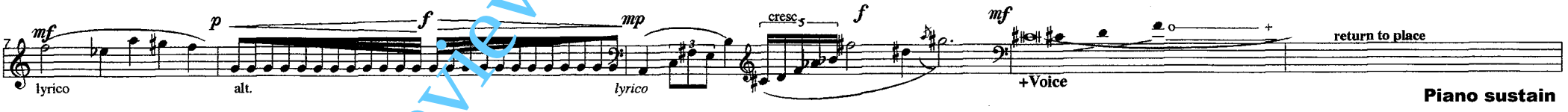
NO TREATMENTS Ⓧ

[Amplified piano resonance]

12. Horn solo



Piano sustain Ped.>>



Piano sustain
Ped. release *

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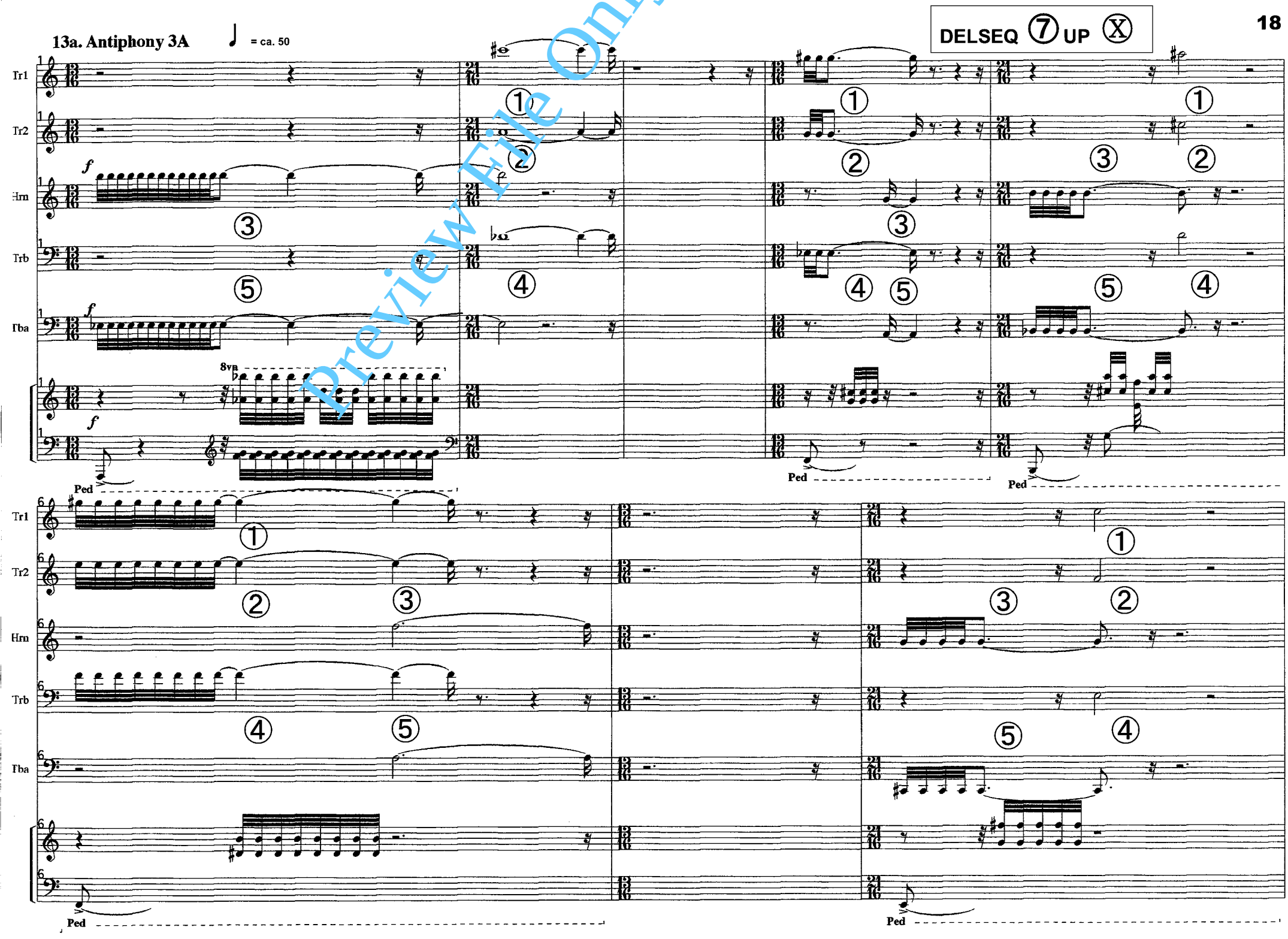
13a. Antiphony 3A

♩ = ca. 50



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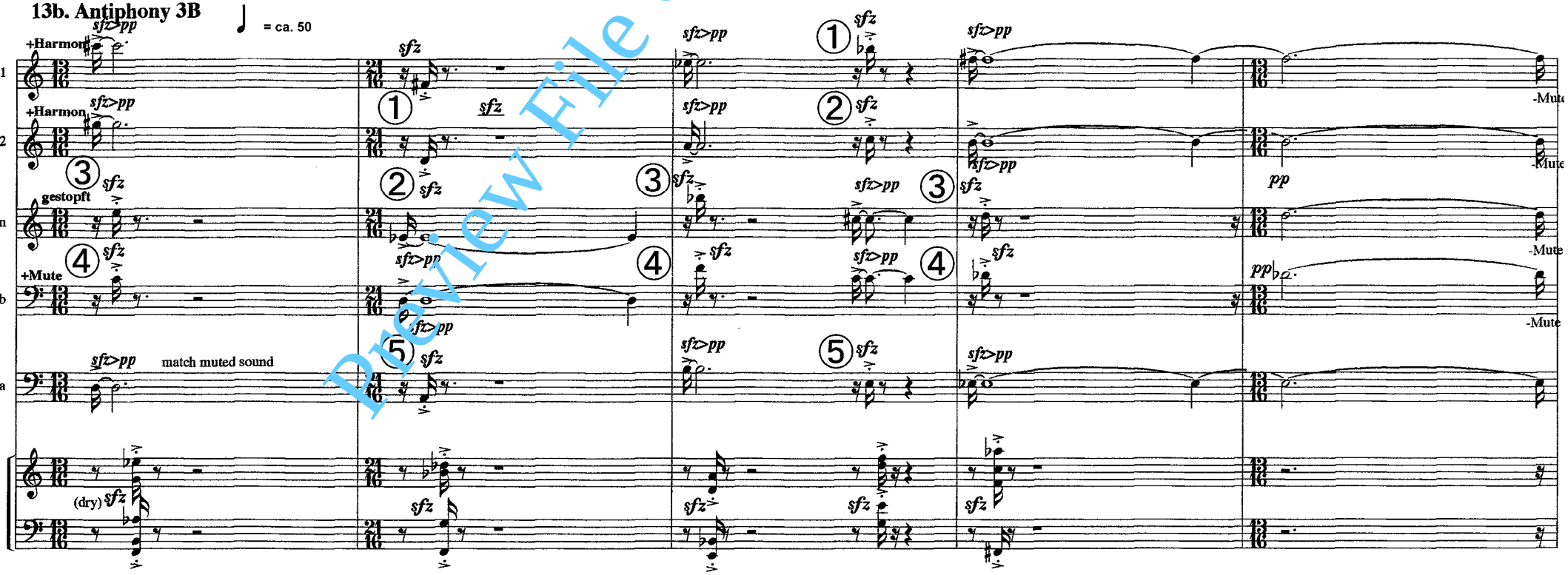
⑦ DOWN - REVSUSTAIN ⑧ UP Ⓧ



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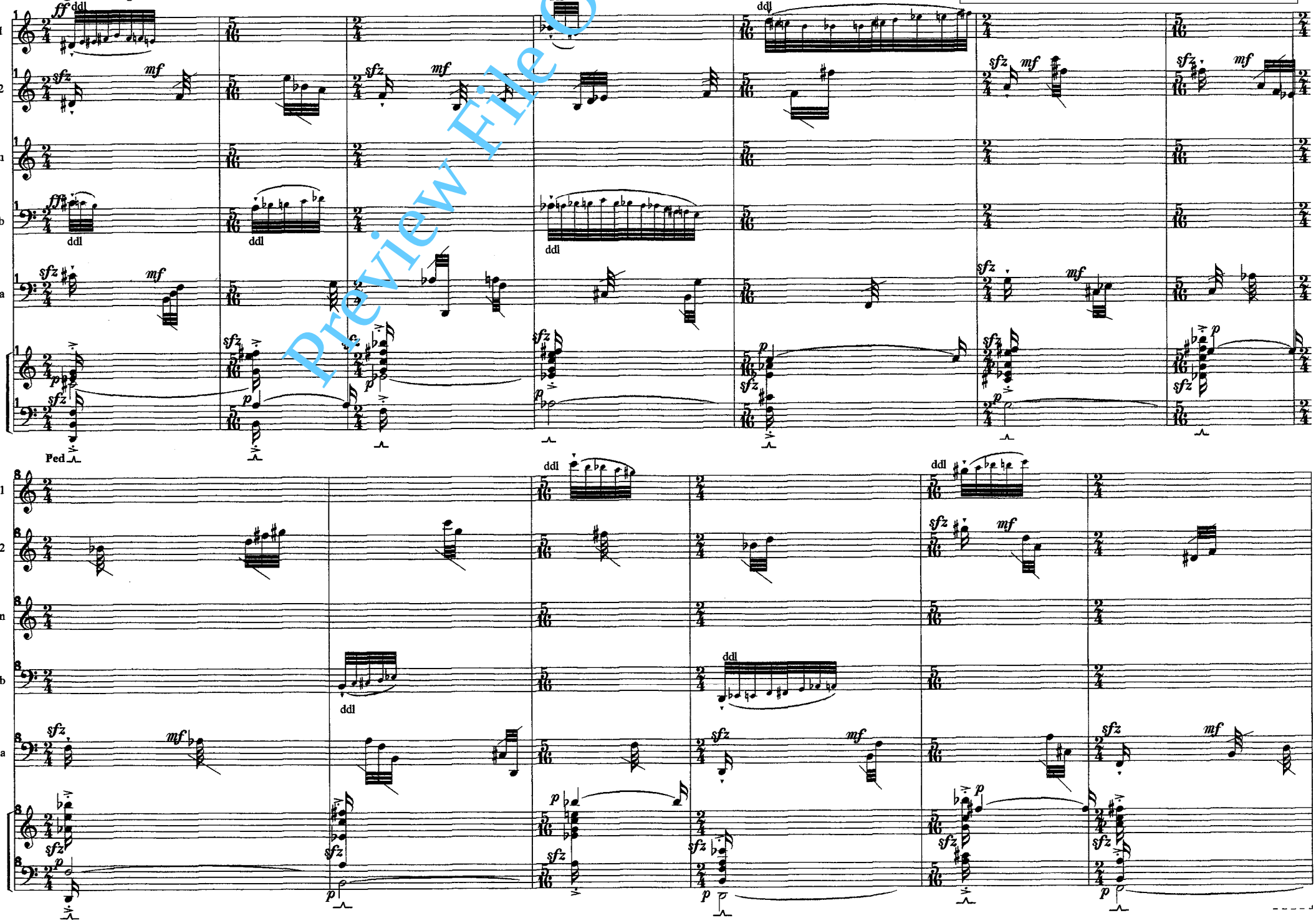
14. Quartet (jazz resonance) 3

♩ = ca. 60 (or faster)



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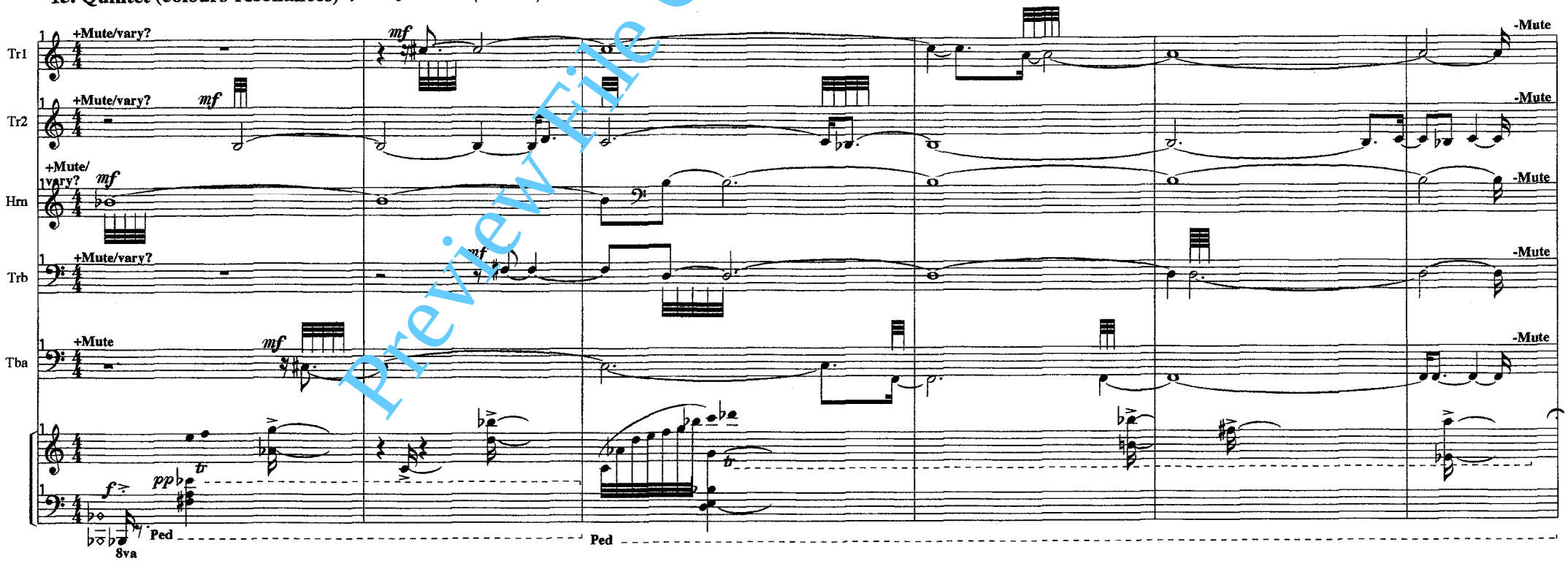
15. Quintet (colours-resonances) 4

♩ = ca. 50 (or slower)

SUSDELAY ⑥ UP Ⓐ



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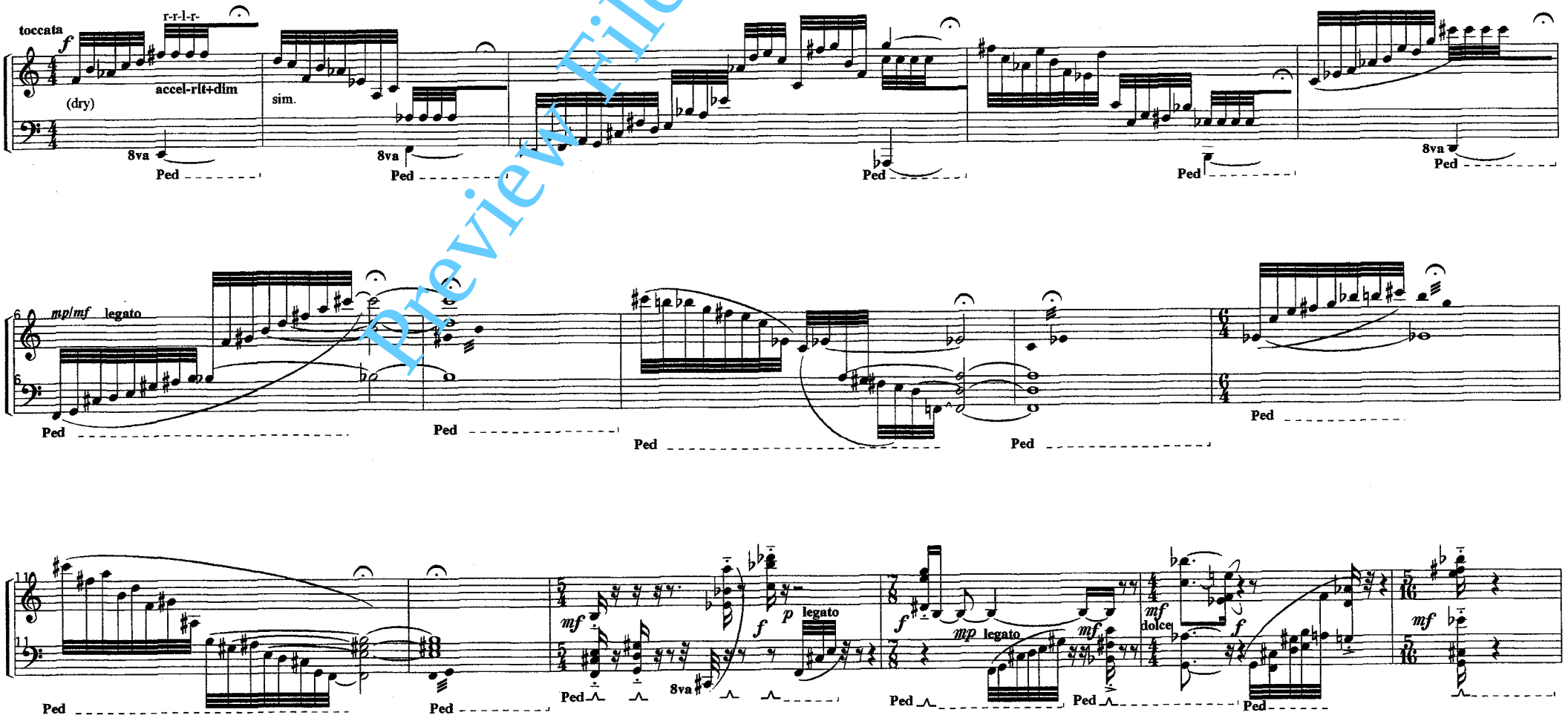
⑥ DOWN - NO TREATMENTS Ⓐ

16. Piano solo 3 ♩ = ca. 60



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DELSEQ ⑦ UP Ⓐ

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Tr1 +Harmon ff

Tr2 +Harmon ff

Hrn gestopft ff

Trb +Mute ff

Tba ff

ff

8va

Tr1 -Mute

Tr2 -Mute

Hrn -Mute

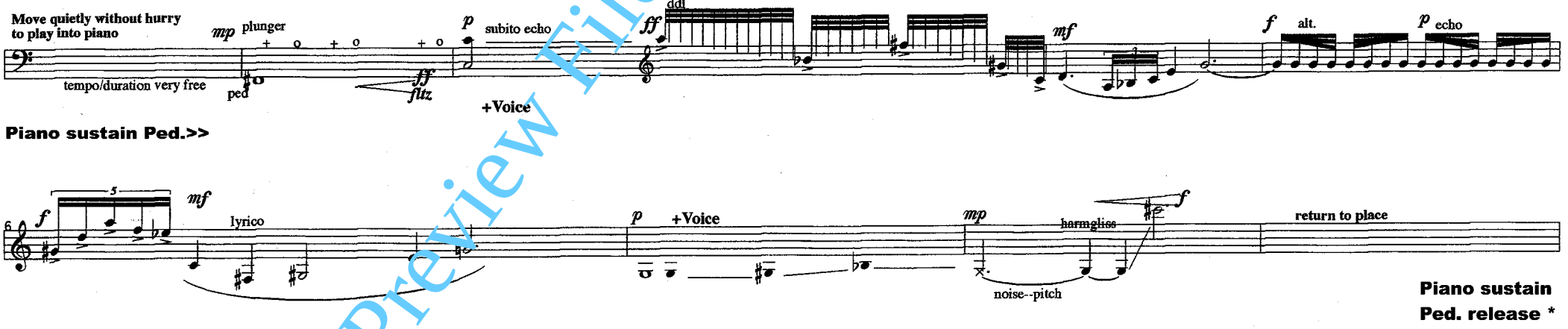
Trb -Mute

Tba

⑦ DOWN - NO TREATMENTS Ⓧ

[Amplified piano resonance]

18. Trumpet 1 solo



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19. Quartet (jazz resonance) 4

♩ = ca. 60 (or faster)

NO TREATMENTS ⓧ

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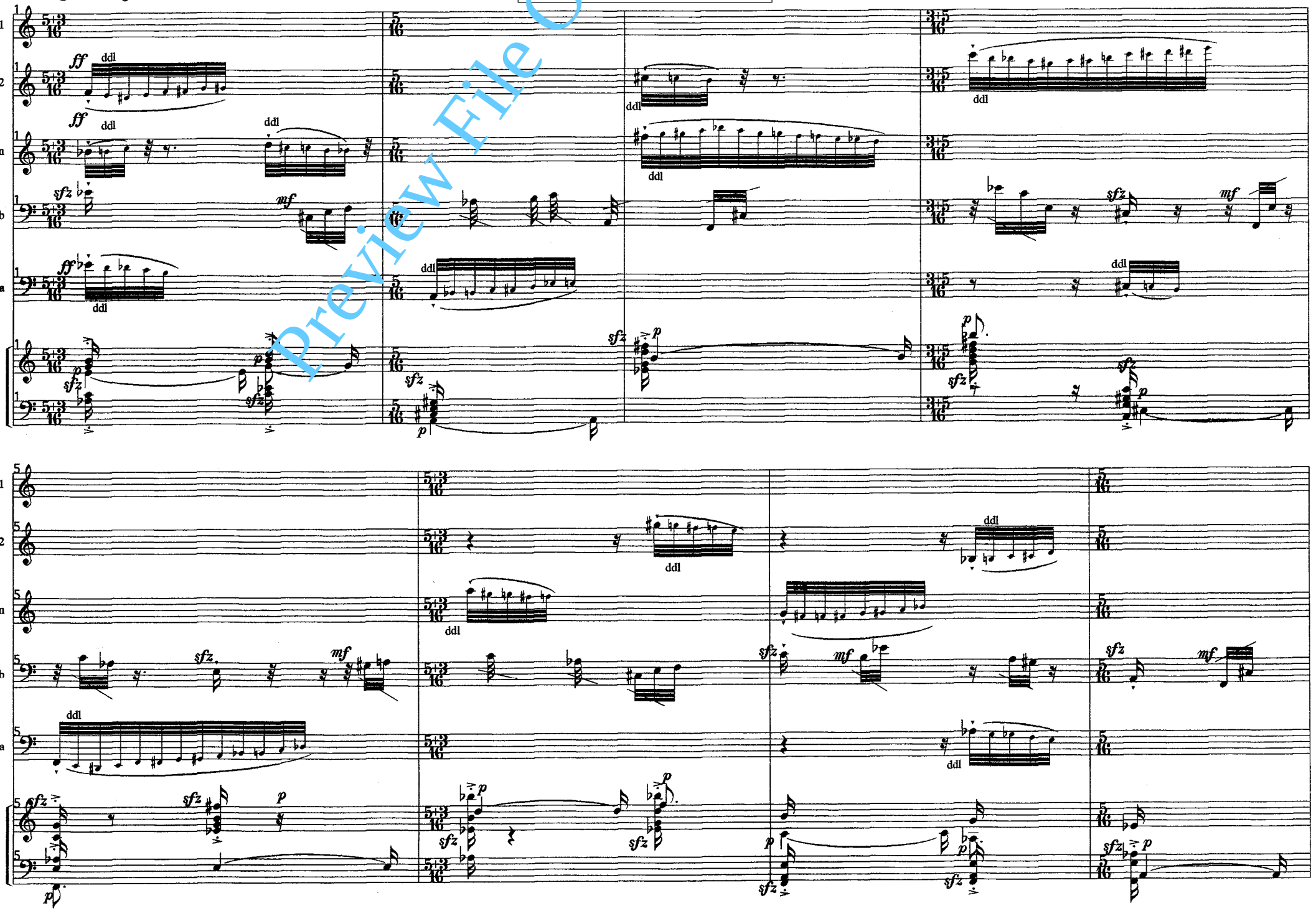
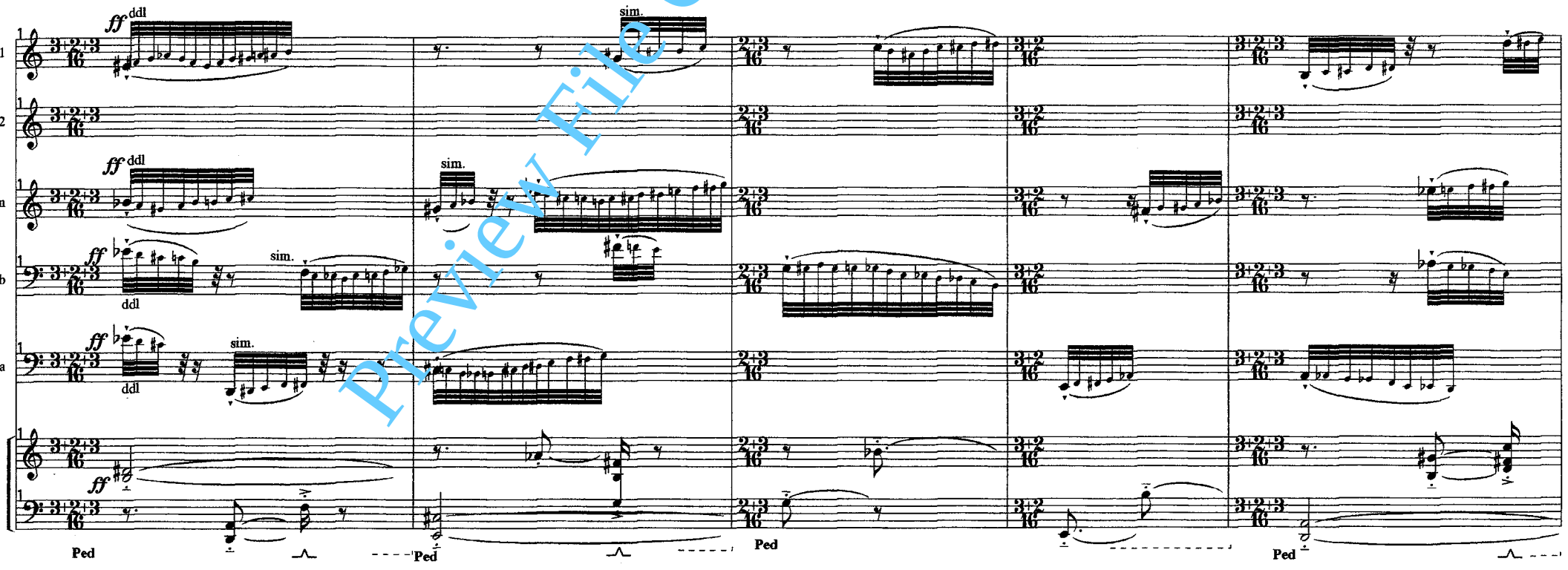


NO TREATMENTS ⓧ

20. Quartet (jazz resonance) 5

♩ = ca. 60 (or faster)



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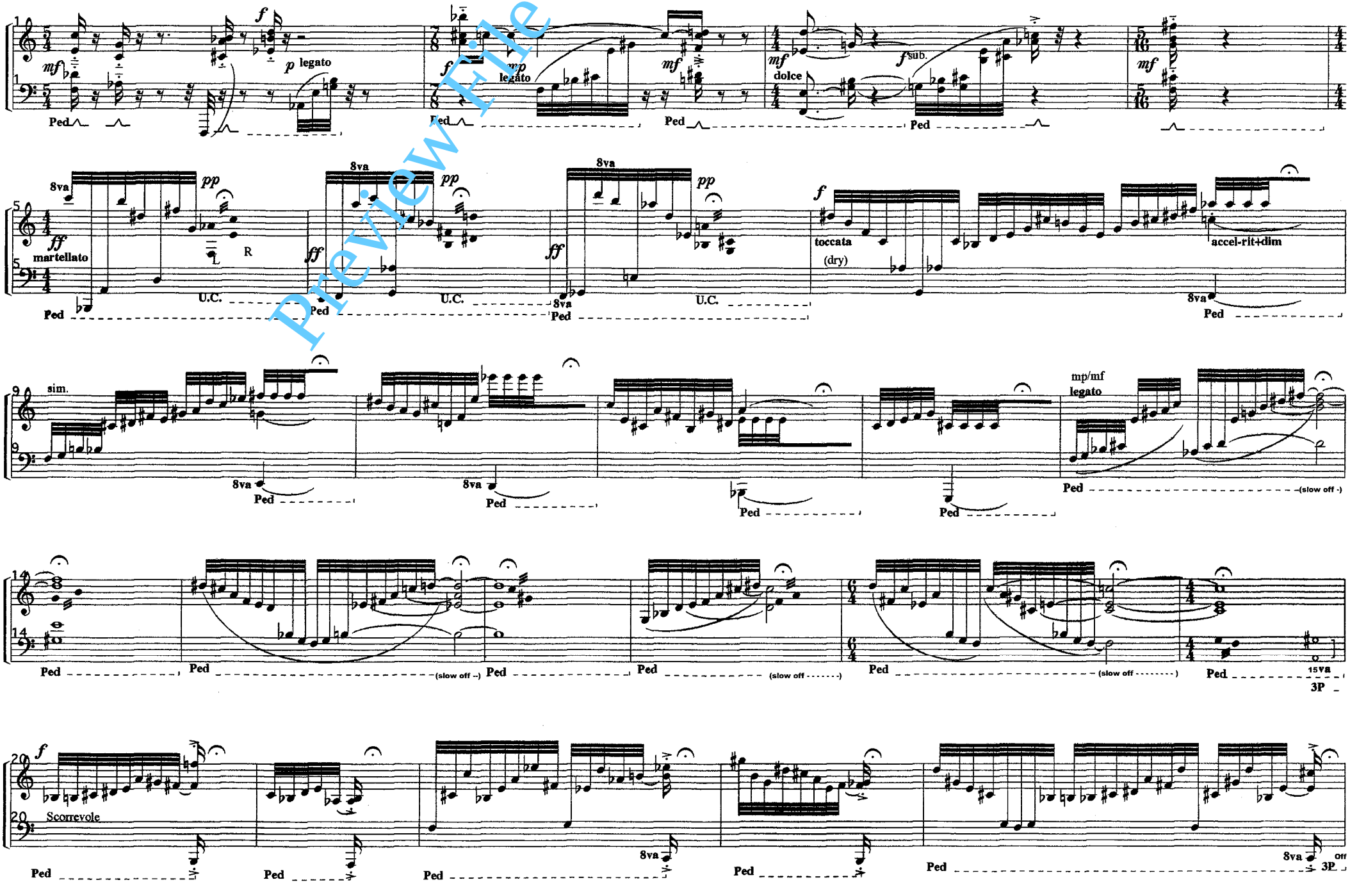
NO TREATMENTS ⓧ

21. Piano solo 4

♩ = ca. 60



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NO TREATMENTS Ⓧ

[Amplified piano resonance]

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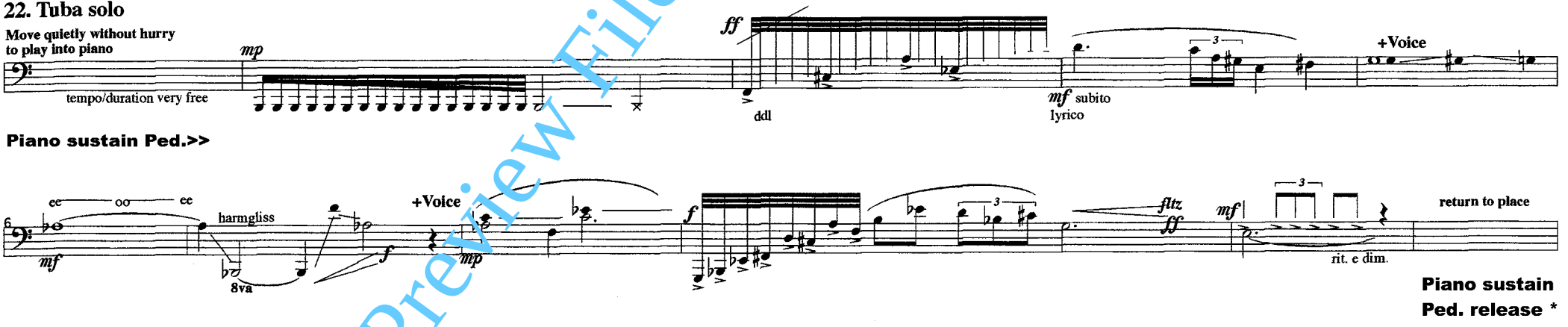
22. Tuba solo



♩ = ca. 50

REVSUSTAIN ⑧ UP Ⓧ

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Tr1

Tr2

Hrn

Trb

Tba

+Harmon

+Harmon

gestopft

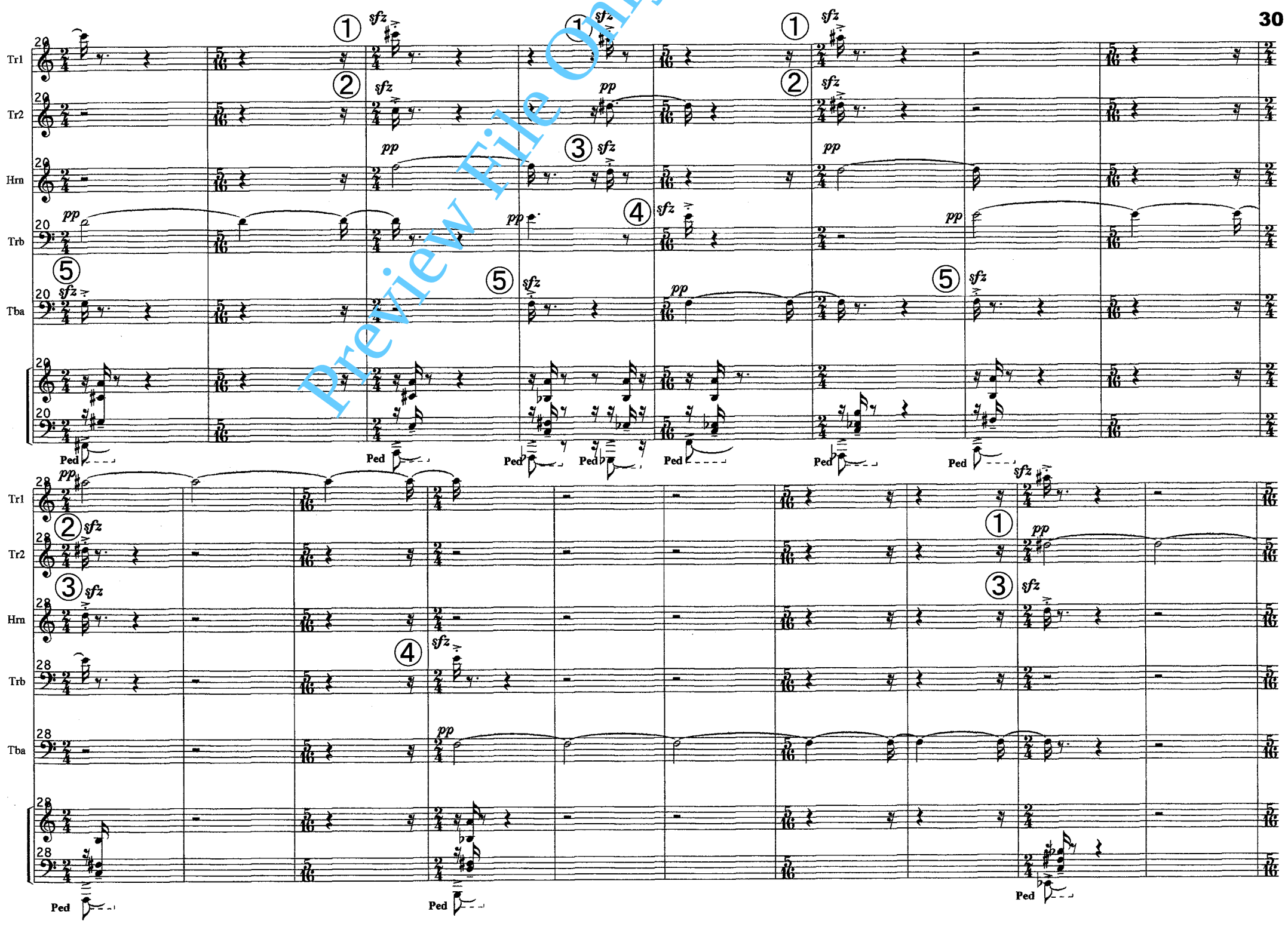
+Mute

match muted sound

possibile

3P

Ped



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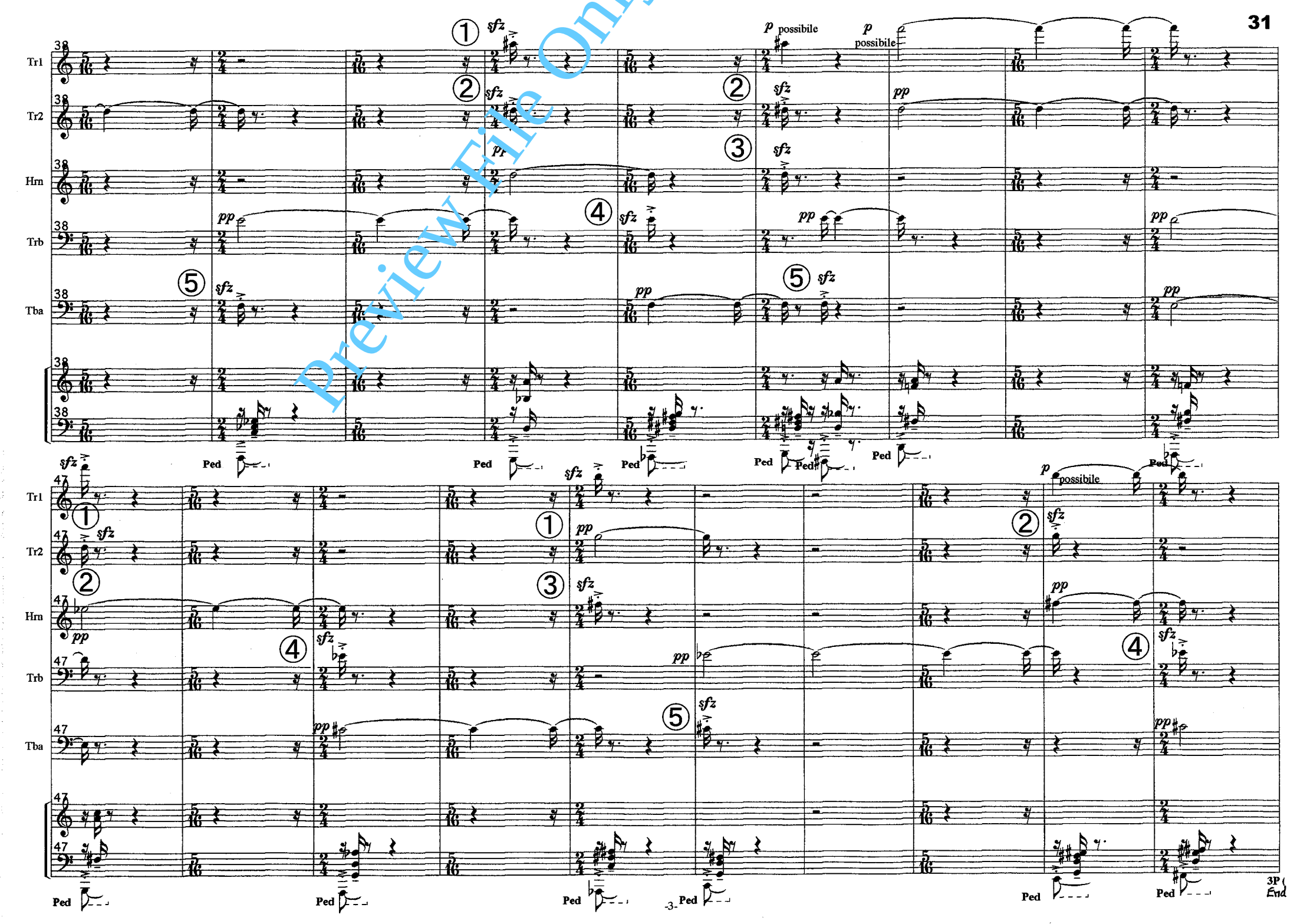

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23b. Antiphony 5B ♩ = ca. 50

DELSEQ ⑦ UP Ⓐ

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Tr1
Tr2
Hrn
Trb
Tba

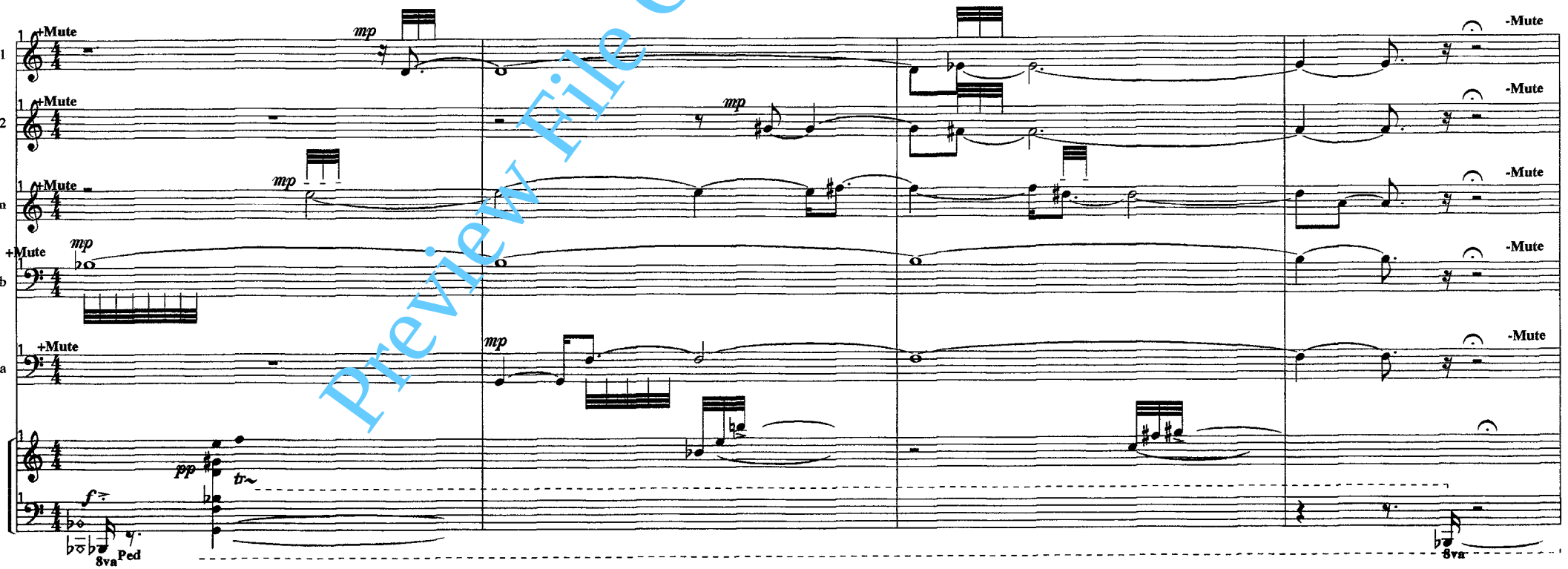
(+m)
sfz
dry
in mf

-Mute

24. Quintet (colours-resonances) 5

♩ = ca. 50 (or slower)

SUSDELAY ⑥ UP Ⓐ



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SUSDELAY FEEDBACK ⑨ UP SLOWLY

▸ FEEDBACK TO 95-100%

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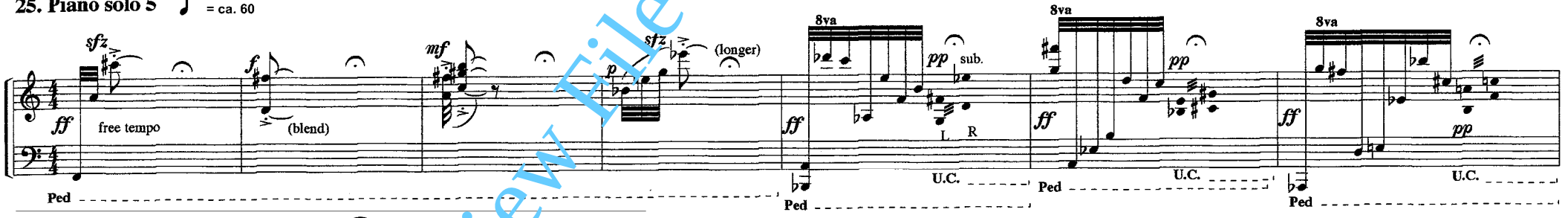
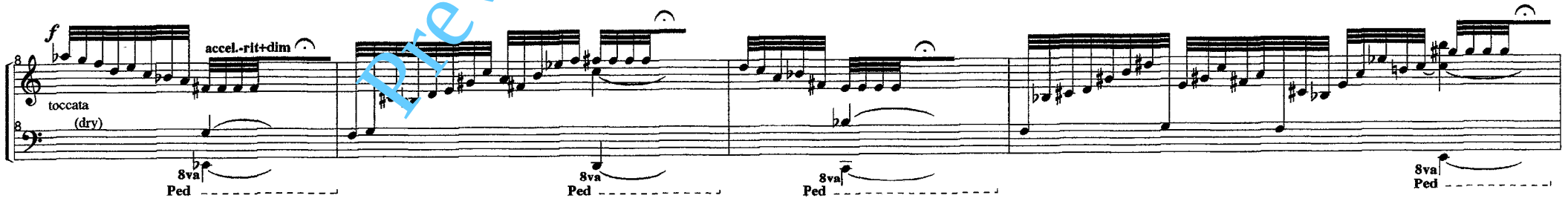
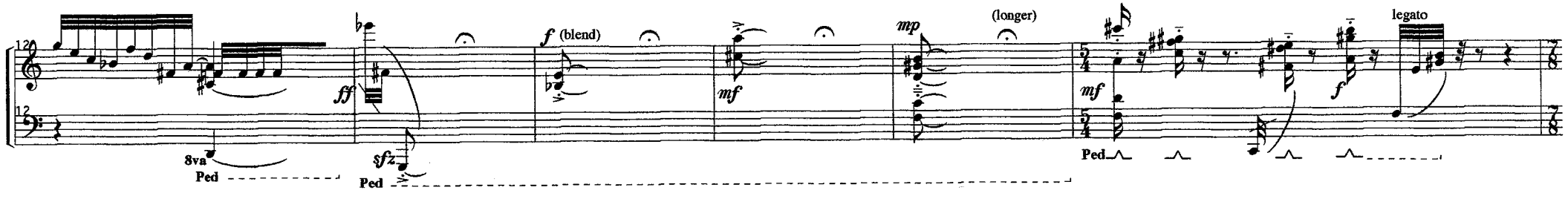
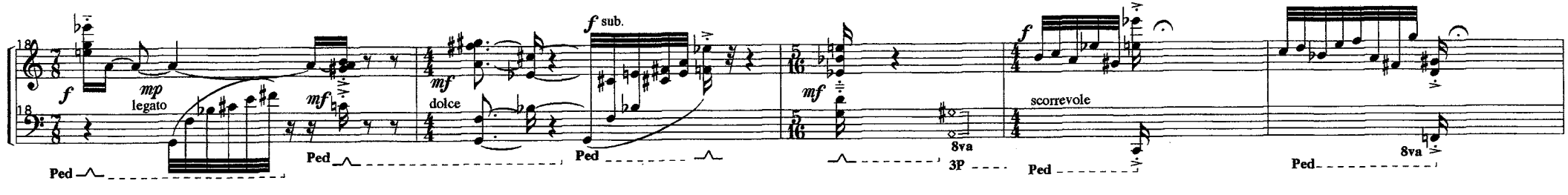
25. Piano solo 5 ♩ = ca. 60



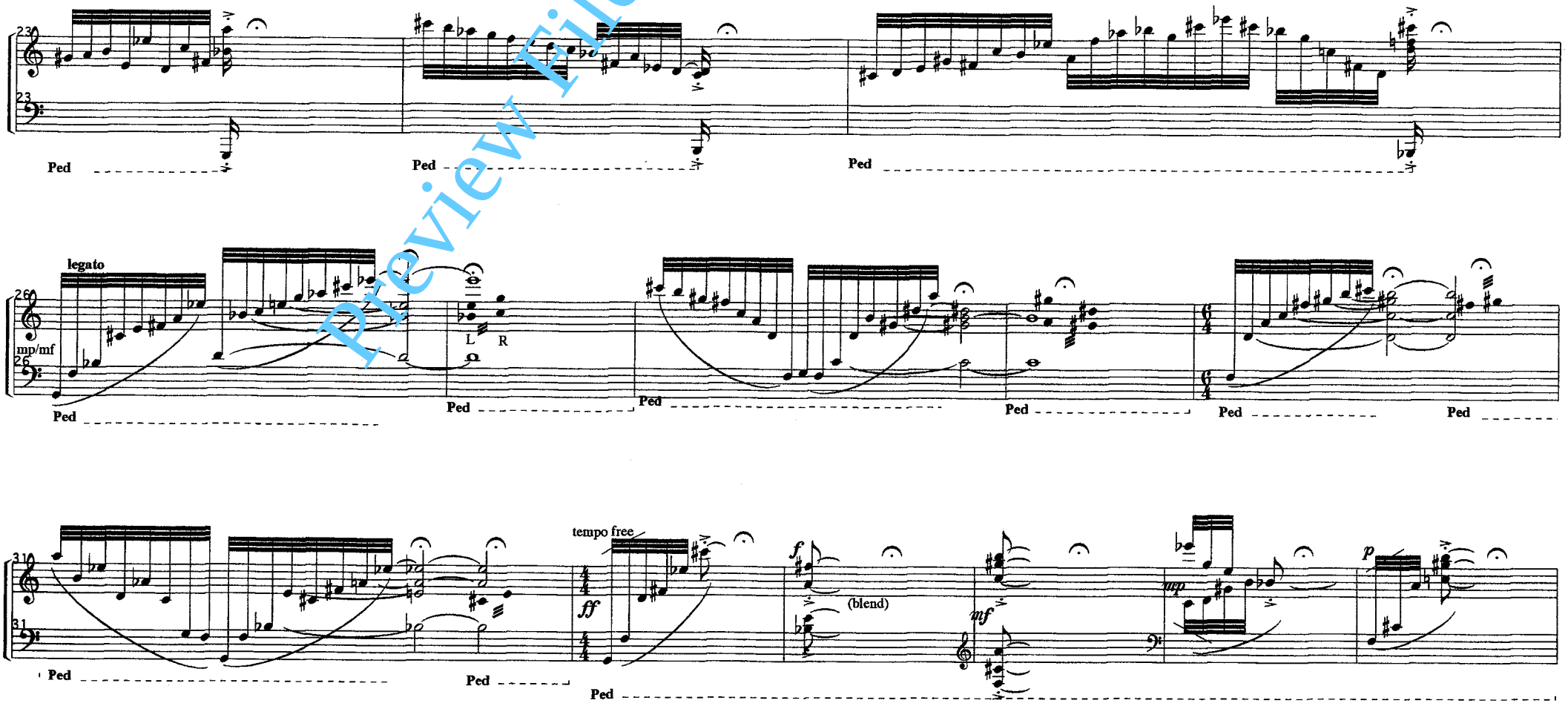
FADE SUSDELAY OUTPUT ⑭ ▸ (FULLY DOWN)







Preview File Only



OUTPUT ⑭ UP A LITTLE, FEEDBACK ⑨ BACK TO 90%

OUTPUT ⑭
FADE WITH PIANO