

Pettersson: Symphony No.5

Audio Spectrum Analysis

Jürgen Lange

Allan Pettersson 100th Birthday

Dreieich, Germany, February 2011

Outline

1 Introduction

2 Opus

- Minutes 0-10
- Minutes 11-20
- Minutes 21-30
- Minutes 31-41

3 Analysis

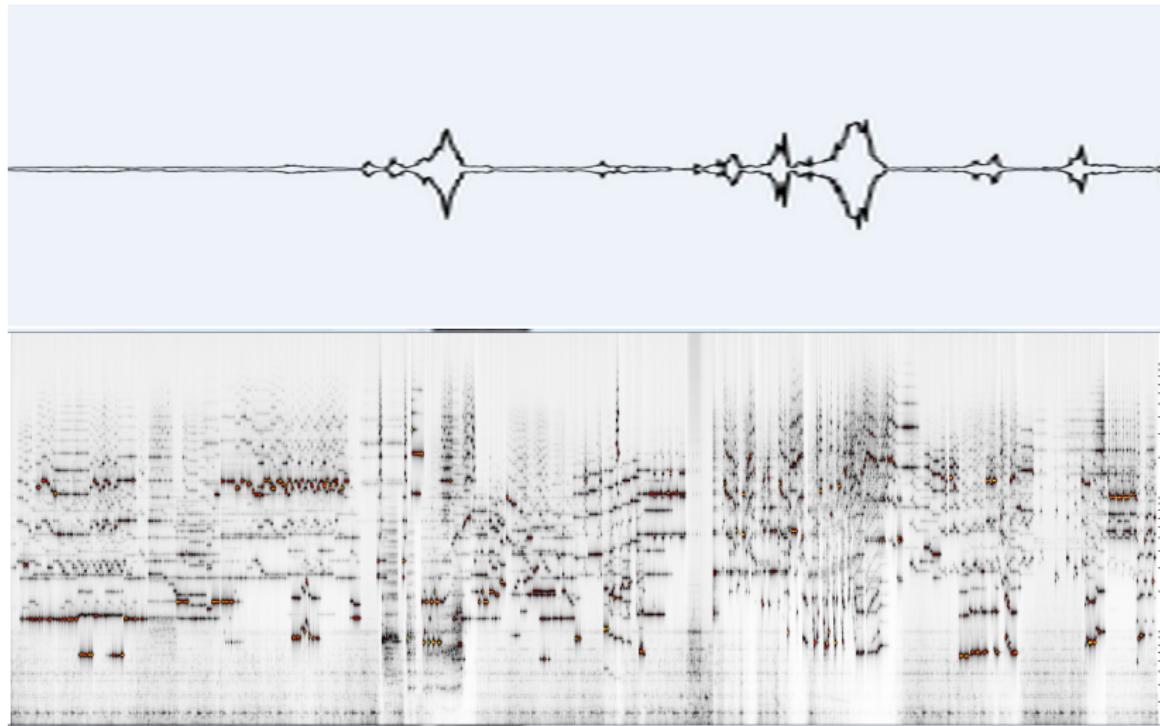
- Opening
- First Climax
- Motivic Work
- Finale
- Comparison Opening/Finale

Introduction

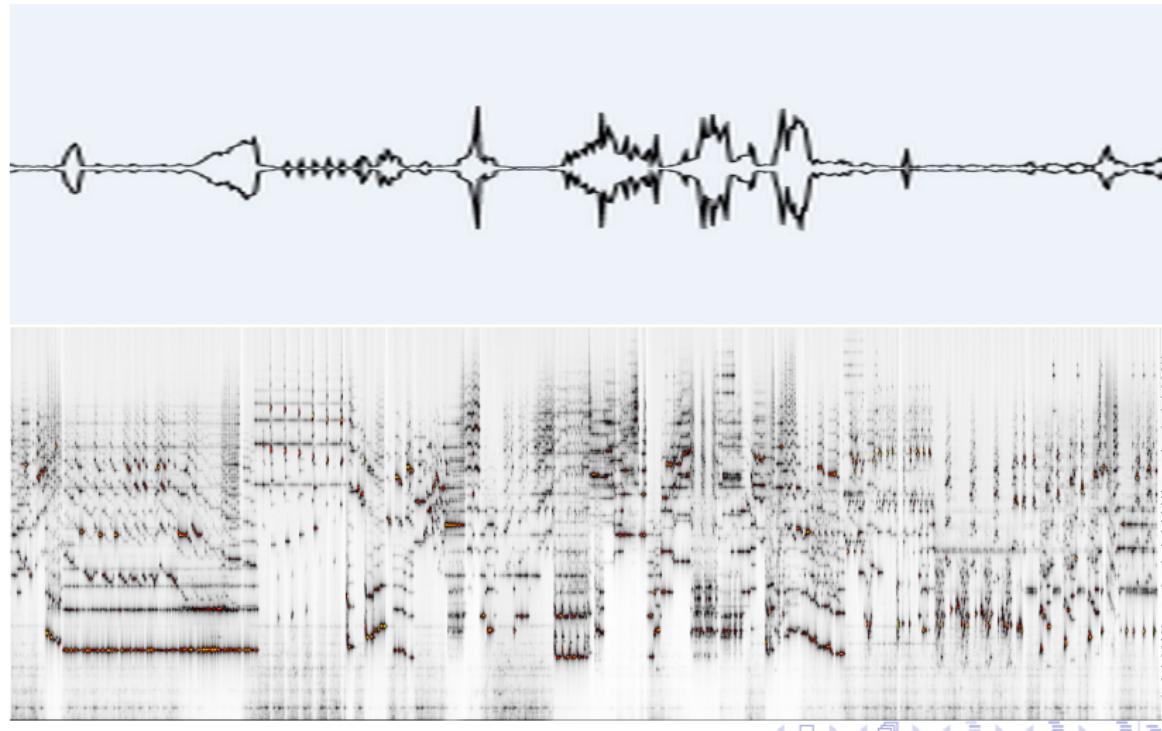


- Composer: Allan Pettersson (1911-1980).
- Opus: Symphony No.5 (1960-1962).
- Recording: Moshe Atzmon, Malmö Symphony Orchestra, BIS-CD-480, 1990-04-03/04 Malmö Konserthus.
- Duration: 41'15. One Movement.

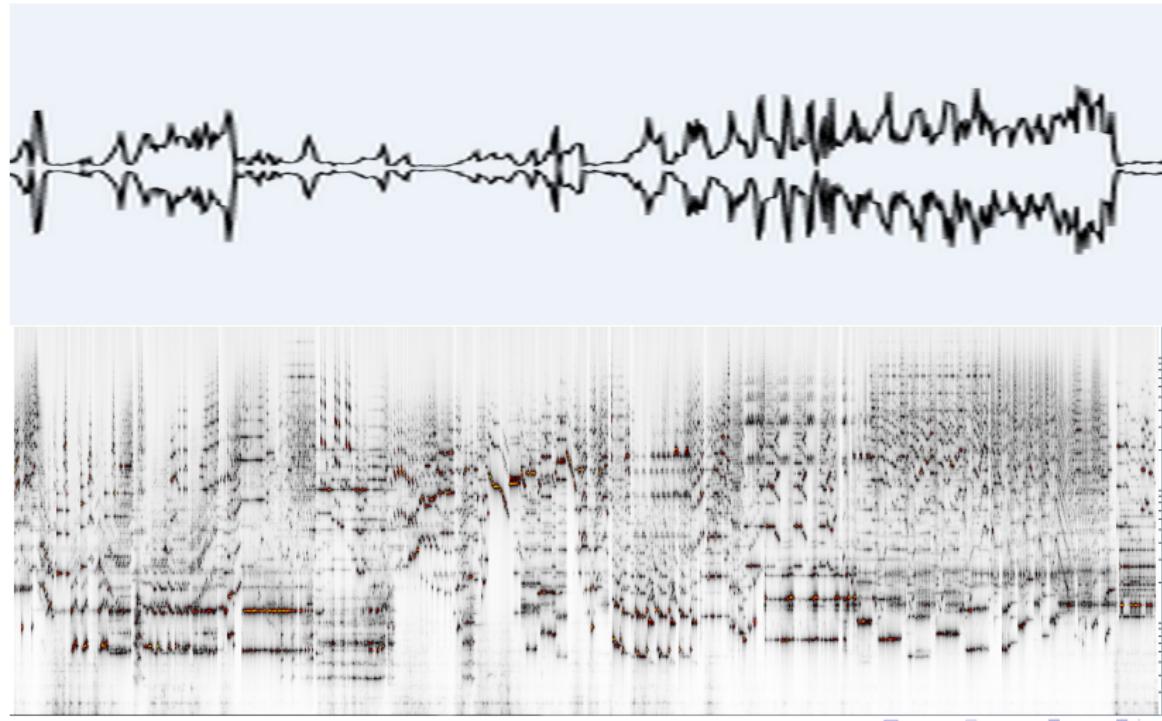
Minutes 0-10



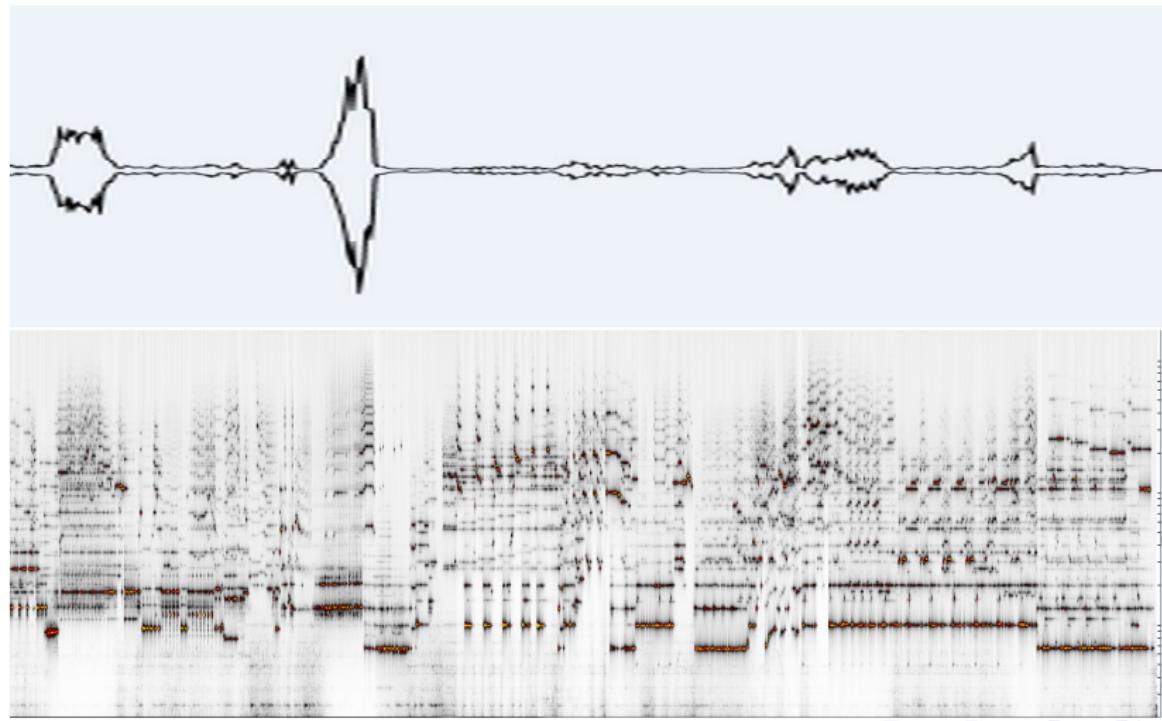
Minutes 11-20



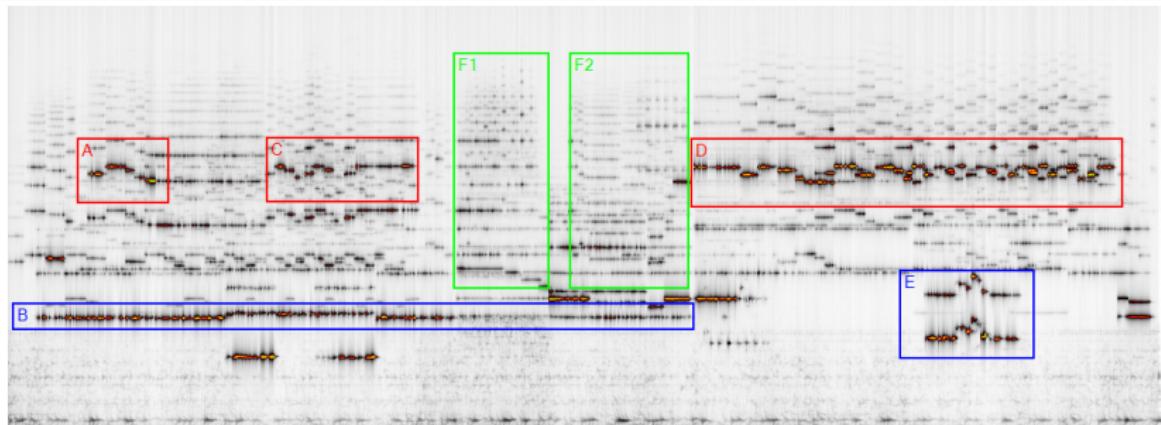
Minutes 21-30



Minutes 31-41

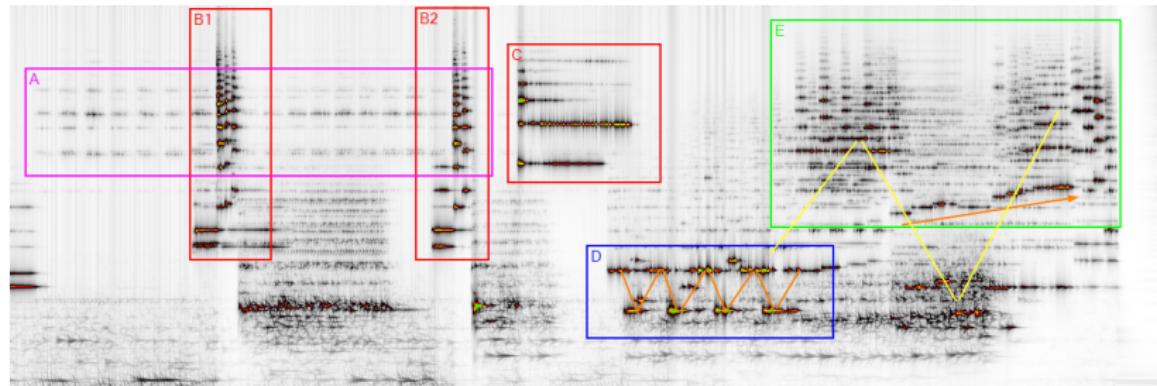


Opening: Minutes 0-3



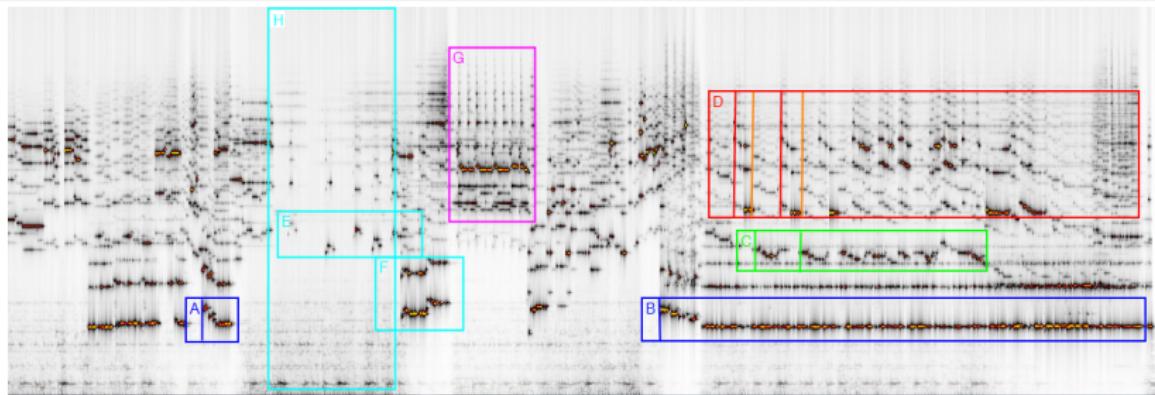
- A: Opening motive (D6, E6, D#6, C#6, C6)
- B: underlying bass voice (B2, C3, B2)
- C: Opening motive, Variation1 (x2)
- D: Opening motive, Variation2, ostinato (x4)
- E: Bass motive (F2, G#2, G2, A#2, A2, F#2, F2)
- F1, F2: high strings (cry, far away, pulsating)

First Climax: Minutes 3-4



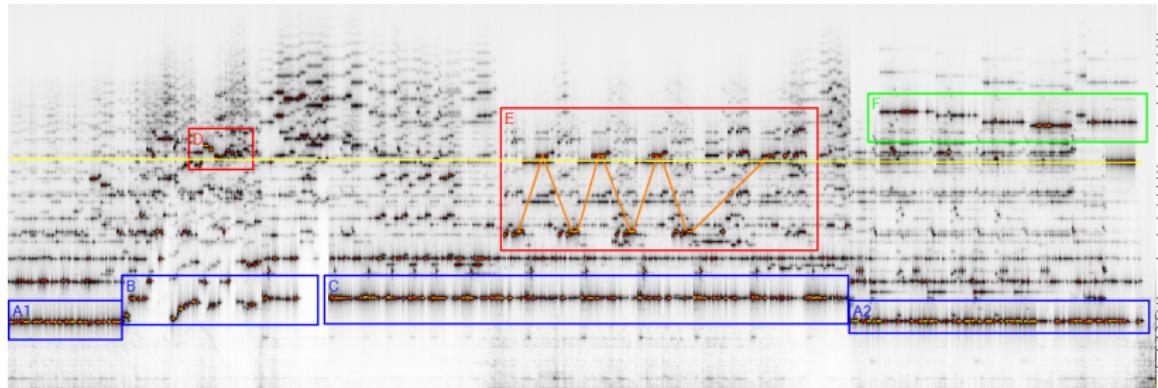
- A: pulsating octaves (far away), dissonant (D#6/D#7)
- B1, B2: cry, dissonant, tension
- C: dissonant, tension, continuous, die away
- D: bass, toggle octaves (E2/E3)
- E: continue toggle in higher strings, crescendo, mahlerian

Motivic Work: Minutes 9-12



- A: motive bass (F2, E2, D#2, D2, C2)
- B: motive A bass (x3), endless
- C: motive A mid range, ostinato
- D: motive A treble, ostinato, echo
- E, F, H: motive (E, G, F), Variation, low density
- G: Variation, pizzicato, high density

Finale: Minutes 37-41

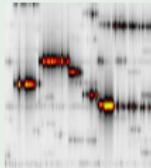


- A1, A2: underlying bass voice (C2)
- B: transition C2 to G2
- C: underlying bass voice (G2)
- D: motive treble (F6, E6, D6, C#6, D#6)
- E: toggle 2 octaves (D#4/D4, D#6/D6)
- F: final motive treble (E7, D7, C7, B6, C7)

Comparison Opening/Finale

Example

Opening Motive (0:16)



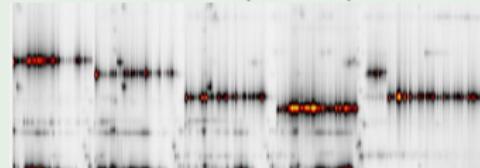
D6, E6, D#6, C#6, C6
(fast, rhythmic)



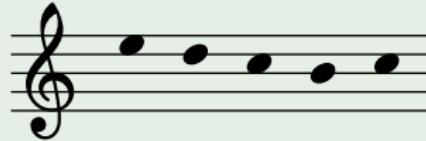
Bass Voice: B2, C3, B2

Example

Final Motive (39:48)



E7, D7, C7, B6, (D7), C7
(slow, symmetrical)



Bass Voice: (G2), C2

Used Software

- Waveforms: foobar2000 v1.1.2, plugin: Waveform seekbar (foo_wave_seekbar.dll).
- Spectrum: spectrum.exe (Audio spectrum monitor)
- LyX 1.6.9, presentation (beamer)
- Lilypond 2.13.6

Acknowledgement

- Robert von Bahr (BIS Records)

For Further Reading I



Colin Davis, B. M.

Toward a Unified Whole: Allan Pettersson's Symphony No.5.
Thesis, University of North Texas, 2007.