

PIANO SONATA

GILBERTO AGOSTINHO

(2013–16)

General Information

Piano Sonata is an algorithmic work generated by a computer program. Because this program uses random procedures, a different version of this work is output at each execution. It is recommended that the performer generate a new version for each concert (more on how to generate a version below), though this is not a requirement. Also, the performer may play more than one single version on a same concert.

Durata: averagely 30'

Notation And General Performance Notes

First movement:

- grace notes should be played as fast as possible and always on the beat
- trills are always executed as minor upper trills
- two types of fermati are used: short and regular. Their duration must be chosen so that the flow of the movement isn't interrupted (therefore they must be quite brief)

Second movement:

- grace notes should be played as fast as possible and always on the beat
- in the last bar, hold down the sustain pedal until the resonance completely disappears

Third movement:

- the cluster in the first bar, ranging from C3 until C5, is to be silently depressed before holding down the sostenuto pedal (which should remain held down throughout the movement). If the cluster is too large to be depressed using only the hands, the player can use a flat object to depress the keys
- notes outside the sostenuto cluster range are always marked as staccatissimo, while notes inside the range have no articulation markings. This notation helps the player anticipate which notes will be held by the pedal and which won't
- five possible tempi are used in this movement: 260, 290, 320, 350 and 380 bpm. As soon as a new tempo is reached, start to gradually accelerate (**accel.**) or slow down (**rit.**) towards the next tempo marking
- the dynamics of this movement consist of a single diminuendo from the **fff** of the first bar until the **ppp** in the last page
- in the last bar, hold down the sostenuto pedal until the resonance completely disappears

Also note that the pedalling is strictly indicated and that all accidentals in this score are notated as sharp.

Generating a unique version

In order to generate a unique version of this work, it is necessary to have the following programs installed on a Linux computer:

- The program `piano-sonata.out` and all its subfolders, which can be freely obtained by sending a request message to gilberto.agostinho.f@gmail.com
- LilyPond, which can be downloaded from www.lilypond.org
- L^AT_EX, which can be downloaded from www.latex-project.org

To generate a score, simply execute the file `piano-sonata.out` and wait until a score is automatically generated as a PDF file named `Piano Sonata.pdf` (this may take a few minutes). To generate a new score, simply run the executable file once again. This program creates another 9 files: three PDF files, three MIDI files and three LilyPond format files (`.ly`), once for each movement.

IMPORTANT NOTE: after generating a score, another execution of `piano-sonata.out` will result in the loss of all previously generated files (they will all be overwritten)! If you wish to keep a particular version of this composition, please copy all its files to a safe location. Also, please notice that this program has been tested with LilyPond version 2.19.37 and pdfunite version 0.24.5, and there is no guarantee it will work with different versions of these programs.

Piano Sonata

Gilberto Agostinho

 = ca. 260

I.

The musical score for 'I.' is written for piano. It consists of four measures. The first measure has a *ppp* dynamic marking and a 'ced.' (crescendo) marking. The second measure has a *ff* dynamic marking. The third measure has a *p* dynamic marking. The fourth measure has a *ppp* dynamic marking. The score includes a trill in the first measure, a trill in the second measure, and a trill in the third measure. The fourth measure features a triplet of eighth notes. The piece ends with a double bar line.

13

ff *pp* *p* *ppp*

18

mp *pp* *ff* *p* *ppp*

23

mf *pp* *f* *mp* *p*

28

f *ff* *mp*

33

pp *ppp* *f*

38

mp *pp* *mp*

43

mf *pp* *ppp*

48

p *ppp* *ff*

52

mp *mf* *mp* *pp* *p*

57 Δ

f *ced.* *mp* *p*

61

mf *f* *pp* *mf*

66

p *ff* *ppp*

71

mp *pp* *mp* *ff*

75

mp *p* *mf*

79

ppp *mf* *ppp* *mp*

Red.

83

ff *ppp* *mf* *p*

87

pp *mf* *mp*

91

p
ℳ.

mp

mf

f

95

mp

p

mp
ℳ.

p

99

p

mp

mf

pp
ℳ.

mp

104

pp

ppp

mp

ppp

108

mf *mp*
Red.

112

mf *p* *mf* *pp*
Red.

117

mp *f* *mp* *ppp* *ff*

122

p *mp* *mf* *mp* *ppp*

127

ff *pp* *mf* *ppp*

tr *tr* *tr*

3

Intro.

132

mf *p* *pp*

tr *tr* *tr*

3

Intro.

137

ppp *mp* *ppp* *mp*

3 *3*

tr

141

ff *mp* *p* *mp* *p*

tr *tr* *tr*

3

Intro.



146

Musical score for measures 146-149. The score is written for piano in G major. Measure 146 features a triplet of eighth notes in the bass clef. Measure 147 has a trill in the bass clef. Measure 148 has a quintuplet of eighth notes in the bass clef. Measure 149 has a trill in the bass clef. Dynamics include *mp*, *f*, and *ppp* with hairpins. A *Red.* (ritardando) marking is present under the *ppp* dynamic.



150

Musical score for measures 150-154. The score is written for piano in G major. Measure 150 features a triplet of eighth notes in the bass clef. Measure 151 has a trill in the bass clef. Measure 152 has a trill in the bass clef. Measure 153 has a trill in the bass clef. Measure 154 has a triplet of eighth notes in the bass clef. Dynamics include *f*, *pp*, *f*, and *mp* with hairpins.

155

Musical score for measures 155-159. The score is written for piano in G major. Measure 155 features a triplet of eighth notes in the bass clef. Measure 156 has a triplet of eighth notes in the bass clef. Measure 157 has a trill in the bass clef. Measure 158 has a trill in the bass clef. Measure 159 has a triplet of eighth notes in the bass clef. Dynamics include *f*, *ff*, *f*, and *p* with hairpins.

160

Musical score for measures 160-164. The score is written for piano in G major. Measure 160 features a triplet of eighth notes in the bass clef. Measure 161 has a trill in the bass clef. Measure 162 has a triplet of eighth notes in the bass clef. Measure 163 has a triplet of eighth notes in the bass clef. Measure 164 has a triplet of eighth notes in the bass clef. Dynamics include *mp*, *pp*, *ppp*, and *pp* with hairpins.

164

ff
Cres.

ppp

ff
Cres.

p

f

169

mf
Cres.

p

mf
Cres.

173

ppp

f

p

177

pp

mf

p

f
Cres.

181

pp *mp* *p* *pp*
dec.

186

ff *mp* *f* *mp*
dec. *dec.*

191

pp *mp* *ppp* *mp* *ppp*
dec.

196

mf *p* *ff* *mp*

200

ff *pp* *mf*

203

p *ff* *mf* *ff* *mf*

208

pp *f* *mp* *ff*

214

p *f* *ff* *mp* *ppp*

219

Musical score for measures 219-223. The score is in G major and 3/4 time. It features a piano accompaniment with various dynamics and trills.

Dynamics: *mp*, *f*, *mp* *Red.*, *mf*.

Trills: *tr*, *tr*, *tr*.

Measure 219: *mp*.
 Measure 220: *f*.
 Measure 221: *mp* *Red.*.
 Measure 222: *mf*.
 Measure 223: *mf*.

224

Musical score for measures 224-227. The score is in G major and 3/4 time. It features a piano accompaniment with various dynamics and trills.

Dynamics: *pp* *Red.*, *ff*, *pp*, *mp* *Red.*.

Trills: *tr*.

Measure 224: *pp* *Red.*.
 Measure 225: *ff*.
 Measure 226: *pp*.
 Measure 227: *mp* *Red.*.

228

Musical score for measures 228-231. The score is in G major and 3/4 time. It features a piano accompaniment with various dynamics and trills.

Dynamics: *ff*, *ppp*, *p*, *f*.

Trills: *tr*, *tr*.

Measure 228: *ff*.
 Measure 229: *ppp*.
 Measure 230: *p*.
 Measure 231: *f*.

232

Musical score for measures 232-236. The score is in G major and 3/4 time. It features a piano accompaniment with various dynamics and trills.

Dynamics: *mp*, *ff*, *f*, *ff* *Red.*, *f*, *ff*.

Trills: *tr*, *tr*, *tr*, *tr*, *tr*, *tr*.

Measure 232: *mp*.
 Measure 233: *ff*.
 Measure 234: *f*.
 Measure 235: *ff* *Red.*.
 Measure 236: *f*.

238

mf *f* *ppp* *f*

242

mp *ff* *mp* *ff* *mf*

247

p *f* *mf*

252

pp *p* *pp* *f*

257

p *f* *mp* *mf*

Red.

261

f *ff* *mp*

265

mp *ff* *mp* *ff*

Red.

270

p *f* *mp* *p* *mf*

Red.

275

f *tr* *mf* *f*

279

ff *f* *p*

283

mp *ff* *mf*

287

f

mp *ff*

291

f
ff *f* *ff*

295

mf *ff*

299

mf *ff* *mf*

303

f *mf* *f*

307

pp *ff* *mf*

Red.

310

f *mf* *ff* Red.

tr

314

mf *f* *mf*

tr

318

f *mf* *fff*

Red.

tr

II. *ca. 160*

ppp *pp* *ppp* *pp*

Red.

(2)

p *mp* *mf* *f*

4

mf *f* *mf* *mp*

6

7:4 5:4 5:4

p *mp* *p* *pp*

(7)

7:4 6:4 5:4

ppp *pp* *ppp* *pp*

(9)

5:4 6:4 6:4

ppp *pp* *p* *mp*

11

5:4 7:4 5:4 5:4

mf *mp* *mf* *f*

(12)

5:4 5:4

mf *mp* *mf* *mp* *p*

14

7:4 6:4 7:4

mp *p* *pp* *ppp*

15

7:4 5:4

pp *ppp* *pp* *ppp*

16

6:4 6:4

pp *p* *pp* *ppp*

18

6:4 5:4 6:4

pp *p* *pp* *ppp*

(19)

6:4 7:4

pp *p* *mp* *p*

(20)

5:4 7:4 7:4

pp *ppp* *pp* *p*

22

7:4 5:4 5:4

mp *mf* *mp* *mf*

24

5:4 5:4 5:4

mp *p* *mp* *p*

(25)

7:4 6:4 6:4

mp *p* *mp*

(26)

5:4 5:4

mf *mp* *mf* *mp*

28

6:4 6:4 7:4

p *mp* *p*

(29)

7:4 5:4 5:4

pp *p* *mp* *mf*

31

6:4 6:4 6:4

mp *mf* *mp* *p*

(32)

6:4 6:4

pp *ppp* *pp* *ppp*

34

6:4 6:4

pp *p* *mp* *mf*

35

mp *p* *mp* *p*

(36)

mp *p* *pp* *ppp*

(38)

pp *p* *pp* *ppp*

40

pp *ppp* *pp* *p*

41

5:4

5:4

mp *p* *mp* *mf*

42

7:4

5:4

7:4

5:4

mp *mf* *mp* *mf*

44

5:4

7:4

6:4

5:4

f *mf* *f* *mf*

(45)

7:4

5:4

5:4

5:4

f *mf* *mp* *mf*

(46)

5:4

5:4

5:4

6:4

f *mf* *f* *mf*

48

7:4

7:4

6:4

mp *mf* *f* *mf*

(49)

6:4

6:4

6:4

mp *p* *mp* *mf*

(51)

5:4

6:4

7:4

mp *p* *mp* *p*

53

5:4

6:4

mp *mf* *f* *mf*

(54)

5:4

6:4

f *mf* *f* *mf*

(55)

7:4

5:4

mp *p* *pp*

57

7:4

5:4

p *mp* *p* *pp*

(58)

6:4 7:4

p *mp* *p* *mp*

60

5:4 6:4

mf *mp* *mf* *mp*

(61)

5:4 5:4

mf *f* *mf* *f*

(62)

7:4 5:4

mf *f* *mf*

(63)

6:4 5:4 6:4 5:4

mp ————— *mf* ————— *mp* ————— *mf* —————

65

7:4 6:4

f ————— *mf* ————— *f* ————— *mf* —————

(66)

7:4 5:4 6:4

f ————— *mf* ————— *f* —————

68

6:4

mf ————— *f* ————— *mf* ————— *mp* —————

(69)

6:4 5:4 5:4

mf *f* *mf*

(70)

6:4 5:4 5:4

f *mf* *f*

(71)

5:4 7:4 6:4

mf *f* *mf*

(72)

5:4 5:4 7:4

f *mf* *mp*

74

5:4

7:4

mf *mp* *mf* *mp*

76

5:4

6:4

p *pp* *p*

(76)

6:4

6:4

mp *p* *mp*

(77)

7:4

7:4

7:4

7:4

mf *mp* *p* *pp*

(78)

6:4 7:4

p *mp* *p*

80

5:4 7:4 6:4

mp *p* *pp*

(81)

5:4 7:4 5:4

p *mp* *mf* *f*

83

5:4 7:4 6:4

mf *mp* *mf*

(84)

7:4 5:4 6:4

mp *mf* *f* *mf*

86

7:4 5:4 6:4

f *mf* *mp*

87

5:4 6:4

p *mp* *p*

(88)

6:4 6:4

mp *p* *mp*

(89)

6:4 7:4 5:4 5:4

mf *mp* *mf*

(90)

7:4 7:4 7:4 7:4

f *mf* *mp*

(91)

6:4 7:4 6:4 6:4

mf *mp* *mf* *mp*

93

6:4 6:4 6:4 6:4

p *mp* *mf* *f*

(94)

6:4 5:4 7:4

mf *f* *mf*

95

7:4 5:4

f *mf* *mp* *p*

97

6:4 5:4

mp *p* *mp*

98

6:4 6:4 7:4

p *pp* *ppp* *pp*

(99)

6:4 5:4

p *mp* *mf*

(100)

5:4 6:4 6:4

f *mf* *f*

102

5:4 6:4

mf *mp* *p*

103

6:4 7:4

mp *mf* *mp*

104

p *mp* *mf*

105

mp *p* *pp*

(105)

ppp *pp* *p* *pp*

(107)

p *mp* *mf* *mp*

(108)

7:4

p *mp* *p*

(109)

5:4

mp *p* *mp*

110

6:4

p *mp* *mf* *f*

(111)

5:4

mf *mp* *p*

113

7:4

7:4

pp *p* *pp*

114

5:4

7:4

p *pp* *ppp*

115

5:4

5:4

5:4

pp *p* *mp* *p*

(116)

6:4

7:4

pp *ppp* *pp*

(117)

p *mp* *mf*

(118)

f *mf* *f*

(119)

mf *mp* *p*

(120)

mp *p* *pp* *p*

(122)

7:4

7:4

pp *ppp* *pp*

(123)

7:4

6:4

6:4

ppp *pp* *p*

124

7:4

5:4

pp *p* *mp*

125

7:4

p *pp* *p*

126

6:4 5:4 5:4

mp *p* *mp*

(126)

5:4 5:4 5:4

p *pp* *ppp*

(127)

6:4 5:4 5:4

pp *p* *mp*

129

6:4 7:4 7:4

mf *f* *mf*

(129)

7:4 6:4 5:4

f *mf* *f*

(130)

6:4 5:4

mf *f* *mf*

132

6:4 7:4 5:4

mp *p* *mp*

133

6:4 5:4

mf *mp* *p* *mp*

134

mf *f* *mf*

135

mp *mf* *mp* *mf*

136

f *mf* *mp* *mf*

137

f *mf* *f*

138

6:4 7:4 6:4

mf *mp* *p* *pp*

139

6:4 7:4 6:4

ppp *pp* *p*

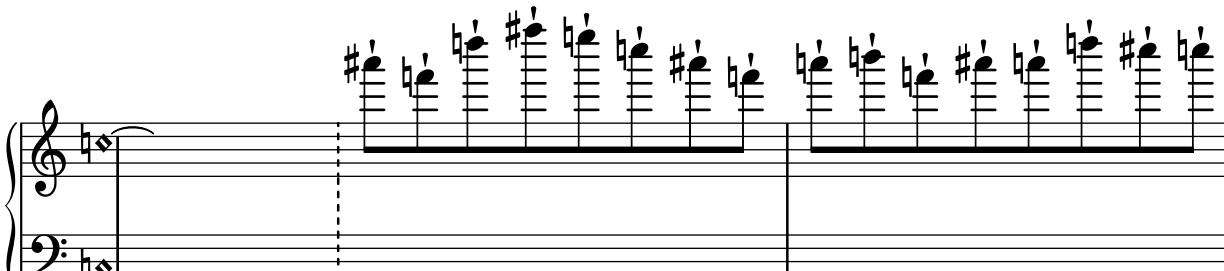
(140)

5:4 5:4 5:4

pp *ppp* *pp*

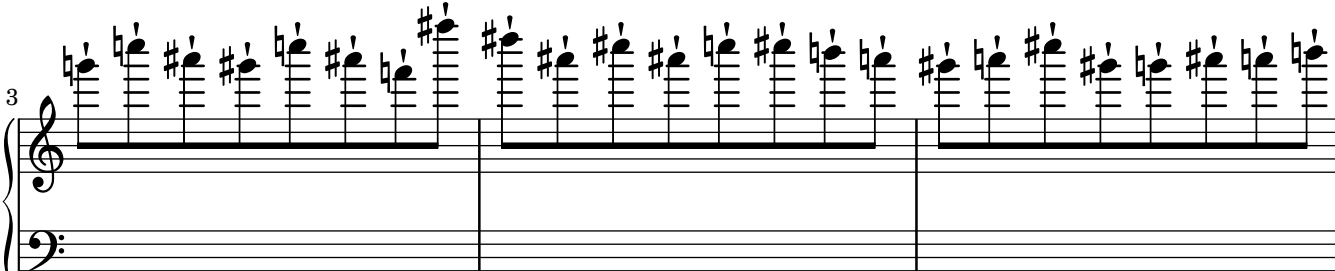
 = 290 **accel.**

III.

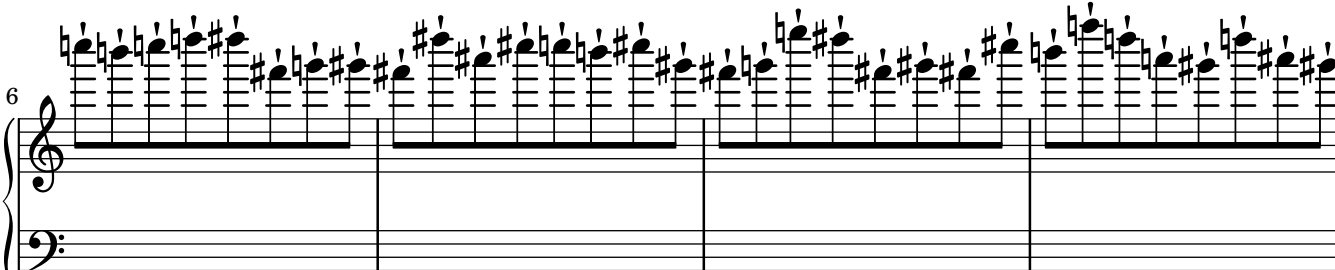


Sost. Ped. *sempre* **fff** poco a poco dim.

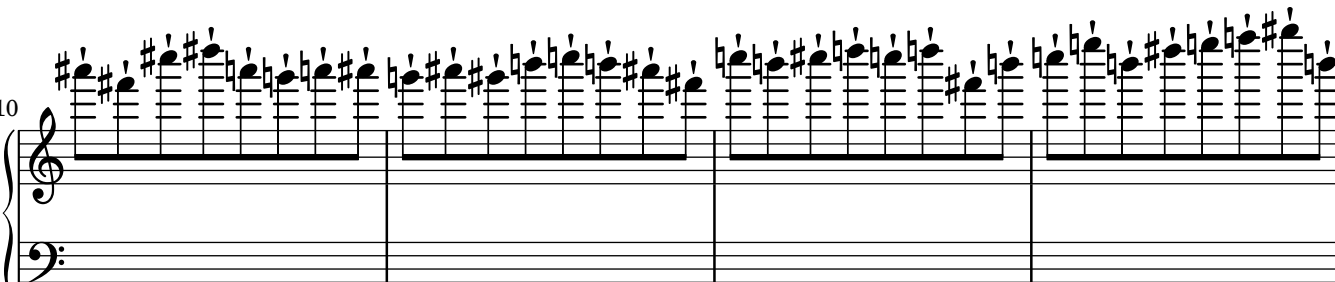
3



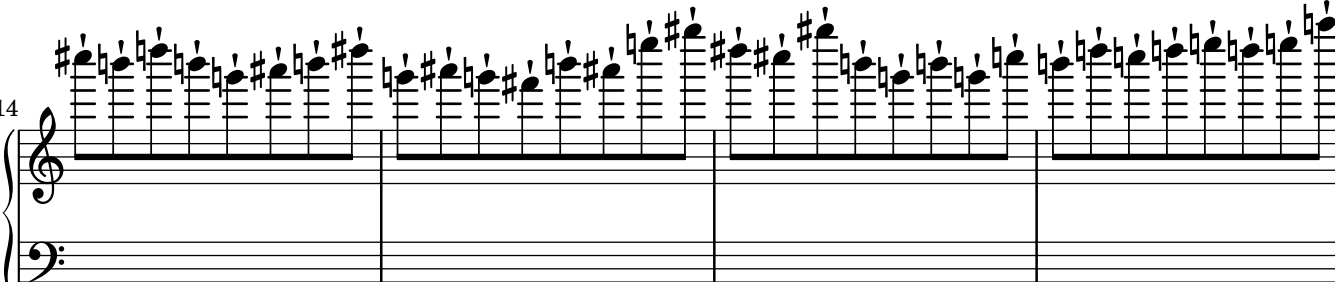
6



10



14



18

22

$\text{♩} = 350 \text{ rit.}$

26

30

34

38

The musical score for 'The Rose Tree' is presented in a grand staff format, consisting of a treble clef and a bass clef. The melody is written in the treble clef, featuring a series of eighth and sixteenth notes with various accidentals (sharps, flats, and naturals). The bass clef part is mostly empty, with a few notes in the first measure. The score is divided into four measures, each containing a single melodic line in the treble clef.

42

43

44

45

♩ = 320 rit.

46

Musical score for measures 46-49. The score is for a piano and features a treble and bass staff. The melody is written in the treble staff, starting on a G4 and moving through various intervals, including octaves. The bass staff is empty. The key signature has one sharp (F#) and the time signature is 4/4. The measures are divided into four groups of four measures each.

50

The image shows a musical score for the song 'The Rose Tree'. It features a single melodic line on a treble clef staff. The key signature has one sharp (F#), and the time signature is 3/4. The melody is composed of eighth and sixteenth notes, with many notes beamed together. The score is divided into four measures by vertical bar lines. The first measure contains 10 notes, the second 10 notes, the third 10 notes, and the fourth 10 notes. The notes are mostly in the range of G4 to E5. The score is labeled with the number '50' at the beginning of the first measure.

54

Musical score for measures 54-57. The score is for a piano and features a treble and bass staff. The melody is written in the treble staff, starting on a G4 and moving through various intervals, including octaves. The bass staff is empty. The key signature has one sharp (F#) and the time signature is 4/4.

58

= 290 accel.

62

66

70

74

78

Measures 78-81: The right hand plays a complex melodic line with many accidentals, while the left hand is empty.

82

Measures 82-85: The right hand continues the complex melodic line, and the left hand remains empty.

= 320 accel.

86

Measures 86-89: The right hand continues the complex melodic line, and the left hand remains empty.

90

Measures 90-93: The right hand continues the complex melodic line, and the left hand remains empty.

94

Measures 94-97: The right hand continues the complex melodic line, and the left hand remains empty.

98

102

106

$\text{♩} = 380 \text{ rit.}$

110

114

118

121

 = 320 **accel.**

125

129

133

137

141

= 350 rit.

144

147

151

155

159

163

 = 290 accel.

167

171

175

179

183

$\text{♩} = 320$ accel.

186

189

193

197

201

♩ = 350 rit.

205

209

213

217

$\text{♩} = 320 \text{ accel.}$

221

225

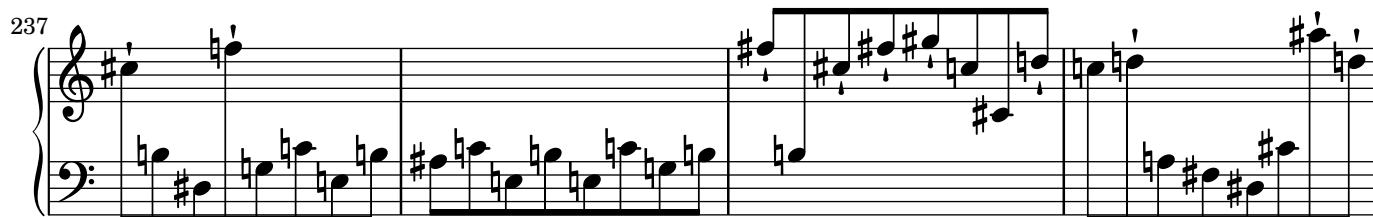
229

 = 380 rit.

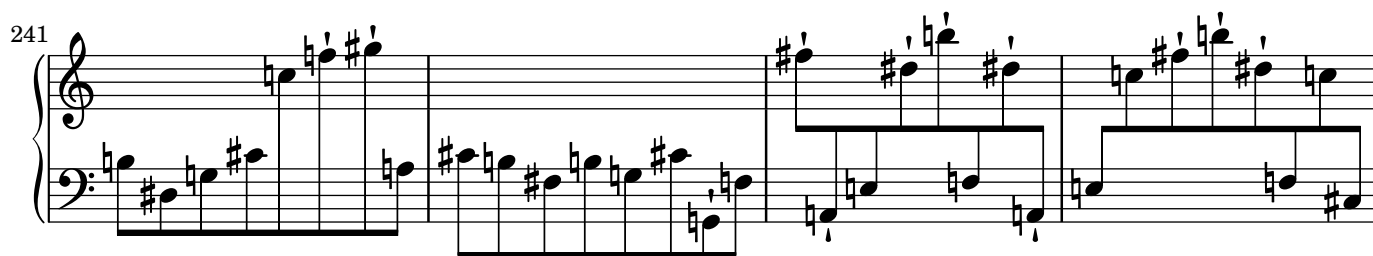
233



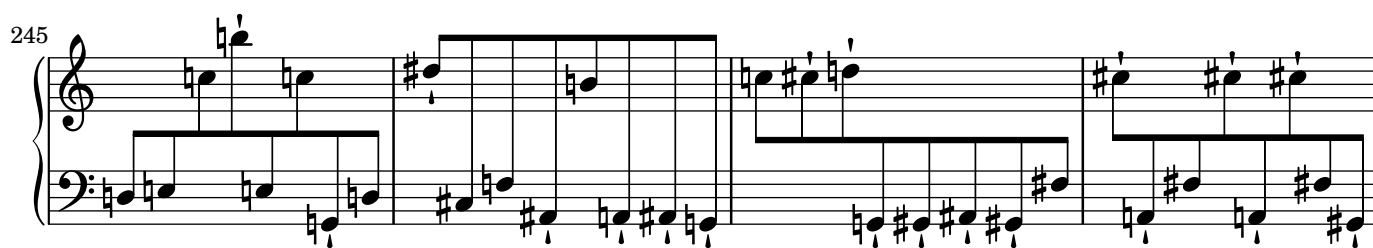
237



241



245



 = 320 rit.

249



253

257

261

265

♩ = 260 accel.

269

273

277

281

285

 = 320 accel.

289

293

297

Measures 297-300. Treble staff: 297 (D4, E4, F#4, G4, A4, B4, C5), 298 (B4, A4, G4, F#4, E4, D4), 299 (C5, B4, A4, G4, F#4, E4), 300 (D4, E4, F#4, G4, A4, B4, C5). Bass staff: 297 (F#3, E3, D3, C3, B2, A2, G2), 298 (F#3, E3, D3, C3, B2, A2, G2), 299 (F#3, E3, D3, C3, B2, A2, G2), 300 (F#3, E3, D3, C3, B2, A2, G2).

301

Measures 301-304. Treble staff: 301 (D4, E4, F#4, G4, A4, B4, C5), 302 (B4, A4, G4, F#4, E4, D4), 303 (C5, B4, A4, G4, F#4, E4), 304 (D4, E4, F#4, G4, A4, B4, C5). Bass staff: 301 (F#3, E3, D3, C3, B2, A2, G2), 302 (F#3, E3, D3, C3, B2, A2, G2), 303 (F#3, E3, D3, C3, B2, A2, G2), 304 (F#3, E3, D3, C3, B2, A2, G2).

= 350 rit.

305

Measures 305-308. Treble staff: 305 (D4, E4, F#4, G4, A4, B4, C5), 306 (B4, A4, G4, F#4, E4, D4), 307 (C5, B4, A4, G4, F#4, E4), 308 (D4, E4, F#4, G4, A4, B4, C5). Bass staff: 305 (F#3, E3, D3, C3, B2, A2, G2), 306 (F#3, E3, D3, C3, B2, A2, G2), 307 (F#3, E3, D3, C3, B2, A2, G2), 308 (F#3, E3, D3, C3, B2, A2, G2).

309

Measures 309-312. Treble staff: 309 (D4, E4, F#4, G4, A4, B4, C5), 310 (B4, A4, G4, F#4, E4, D4), 311 (C5, B4, A4, G4, F#4, E4), 312 (D4, E4, F#4, G4, A4, B4, C5). Bass staff: 309 (F#3, E3, D3, C3, B2, A2, G2), 310 (F#3, E3, D3, C3, B2, A2, G2), 311 (F#3, E3, D3, C3, B2, A2, G2), 312 (F#3, E3, D3, C3, B2, A2, G2).

313

Measures 313-316. Treble staff: 313 (D4, E4, F#4, G4, A4, B4, C5), 314 (B4, A4, G4, F#4, E4, D4), 315 (C5, B4, A4, G4, F#4, E4), 316 (D4, E4, F#4, G4, A4, B4, C5). Bass staff: 313 (F#3, E3, D3, C3, B2, A2, G2), 314 (F#3, E3, D3, C3, B2, A2, G2), 315 (F#3, E3, D3, C3, B2, A2, G2), 316 (F#3, E3, D3, C3, B2, A2, G2).

317

$\text{♩} = 320$

321

ppp

325

ppp

329

ppp

333