Auflösung (2017)

for cello and live-electronics

Luc Döbereiner

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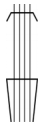
The piece is to be understood as a single continuously transforming sound and should therefore always be played *legatissimo*. Succeeding sonorous states should merge into each other. There are rare jumps or discontinuities, such as when jumping behind the bridge. These should be executed as fast as possible. The notated positions, pressures, and movements are conceived so as that they interact with each other and let partly unpredictable sounds and textures emerge.

Apart from a few exceptions, the piece is notated in three staves. The uppermost staff indicates the bowing position and the bow pressure. The middle staff indicates the horizontal bowing speed and the lowest staff indicates the left hand positions and figure pressure. Absolute time is given in seconds above the systems and indicated by a vertical line every two seconds.

Clefs



This clef is used for the left and for the right hand. It shows the positions of the bow or fingers between the bridge and the end of the fingerboard.

This clef is used for notating actions between the tailpiece and the bridge.

Bowing Pressure

very little pressure

little pressure

„normal“ bow pressure

overpressure

strong overpressure

Bowing speed and type of bowing

Bow changes are not explicitly notated, but a result of the horizontal bowing speed. Bow changes should only be audible when the bow pressure is very high, the bowing speed is very fast or when the bowing close to the frog is indicated. The type of bowing is notated by three different indications and arrows for transitions between these types of bowing: “ord” denotes a “normal” type of bowing, “closer to the frog”, and “at the frog”, which indicates a very noisy type of bowing.

Fingerpressure

Like the bowing pressure the finger pressure of the left hand are indicated by different colours.

Harmonic pressure

slightly stronger harmonic pressure

Half-harmonic pressure

String almost completely depressed

String completely depressed (normally fingered note)

“Hammer-ons”

Dashed lines indicated hammer-ons with the fingers of the left hand. Depending on the colour these are either harmonic hammer-ons or fully depressed hammer ons. The distances between the dashes indicate a relative speed. However, the hammer-ons should always be executed quickly and may be slightly irregular.

Note heads

Note heads only serve to easily identify and differentiate pitches and should in no way be articulated or accented. The note head ▲ indicates a finger position as closely as possible to the bridge (as high as possible).

Multiphonics

Multiphonic sounds are created by different techniques: bowing closely to the bridge, overpressure, fingering between bow and bridge, half-

harmonics, and harmonic mulitphonics. The latter indicated by the letter “**M”** above the note head. These multiphonics will not be audible in every context. The letter “**M**” thus indicates a potential not a sound result.

Setup and Live-Electronics

One microphone picks up the cello sound, which is processed by a SuperCollider patch, which can be obtained from the composer (luc.doebereiner@gmail.com). The SuperCollider patch outputs one channel to be played back over a transducer attached to the cello itself. Moreover, the cello is to be amplified over two loudspeakers on the stage and to the left and to the right of the cello.

Duration: 8 minutes

Auflösung was commissioned by the Sonification Festival Berlin, October 2017.

Auflösung

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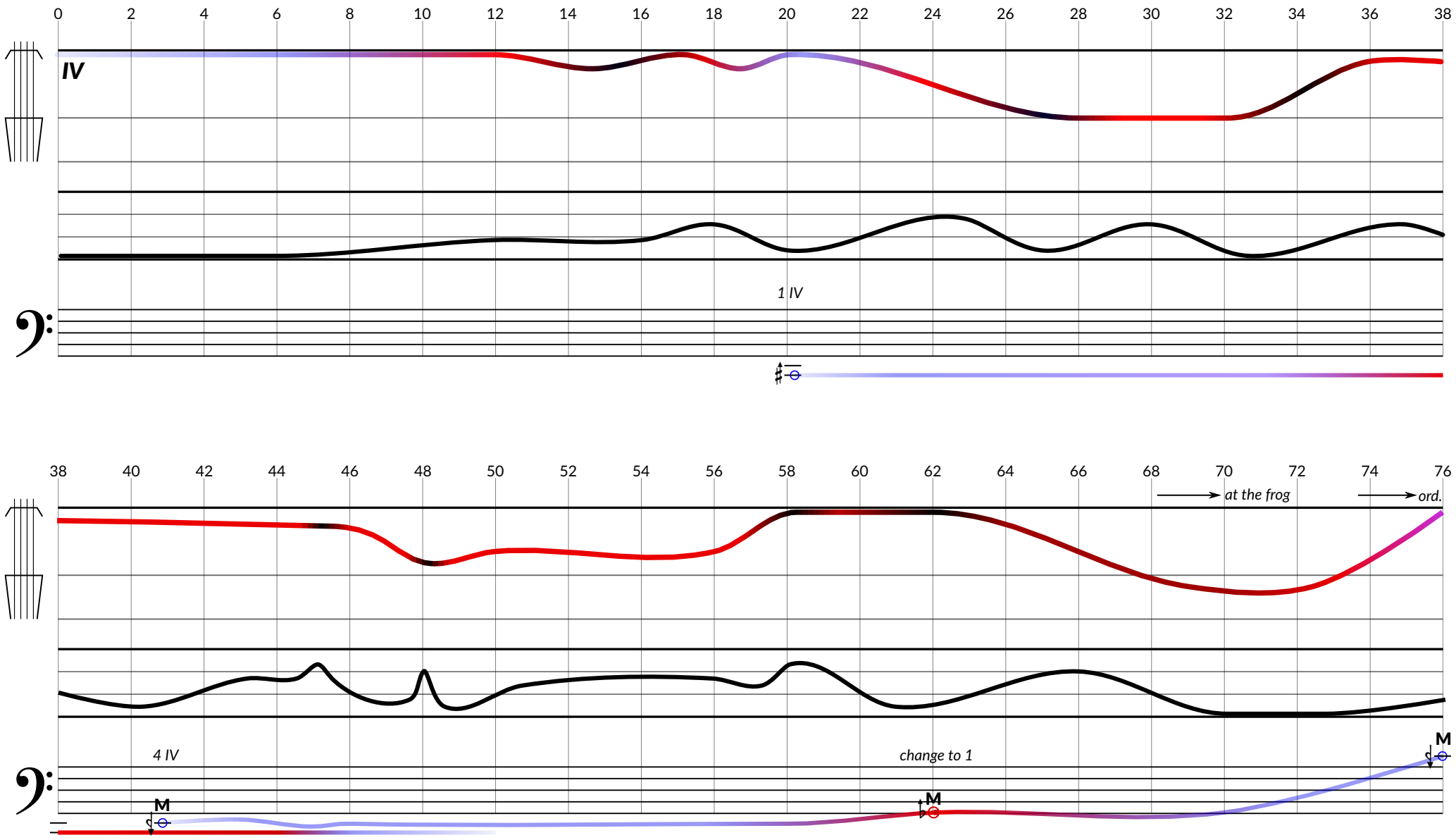
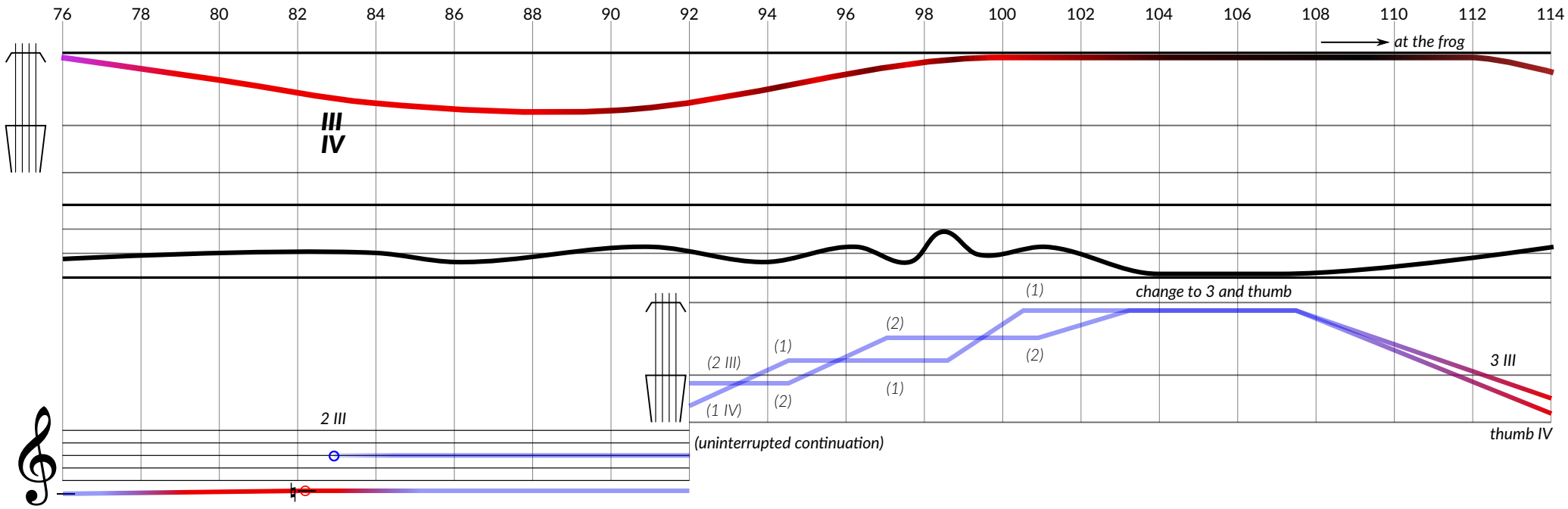
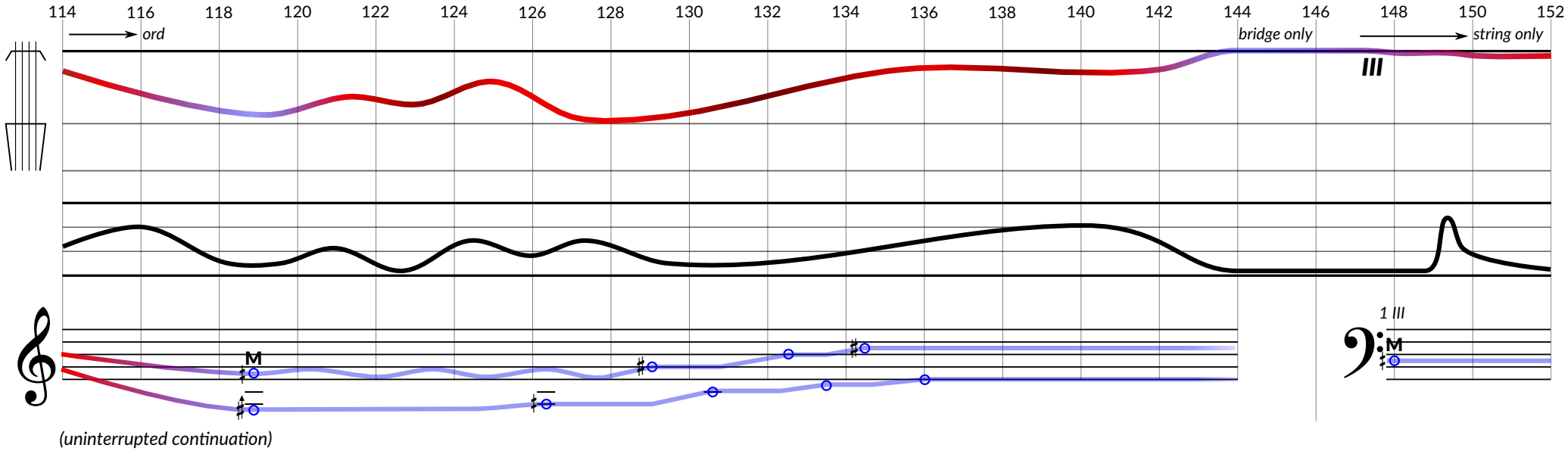
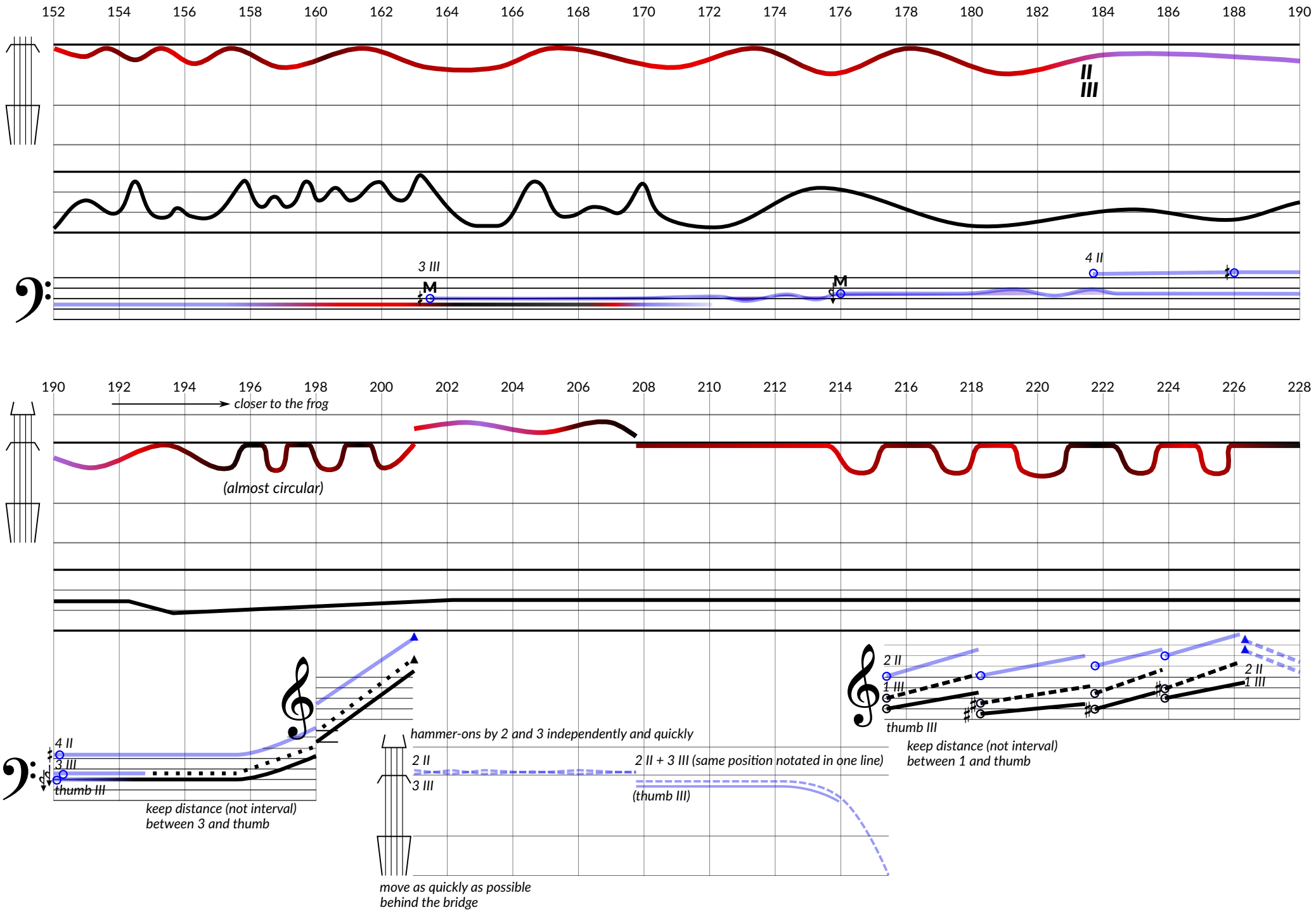
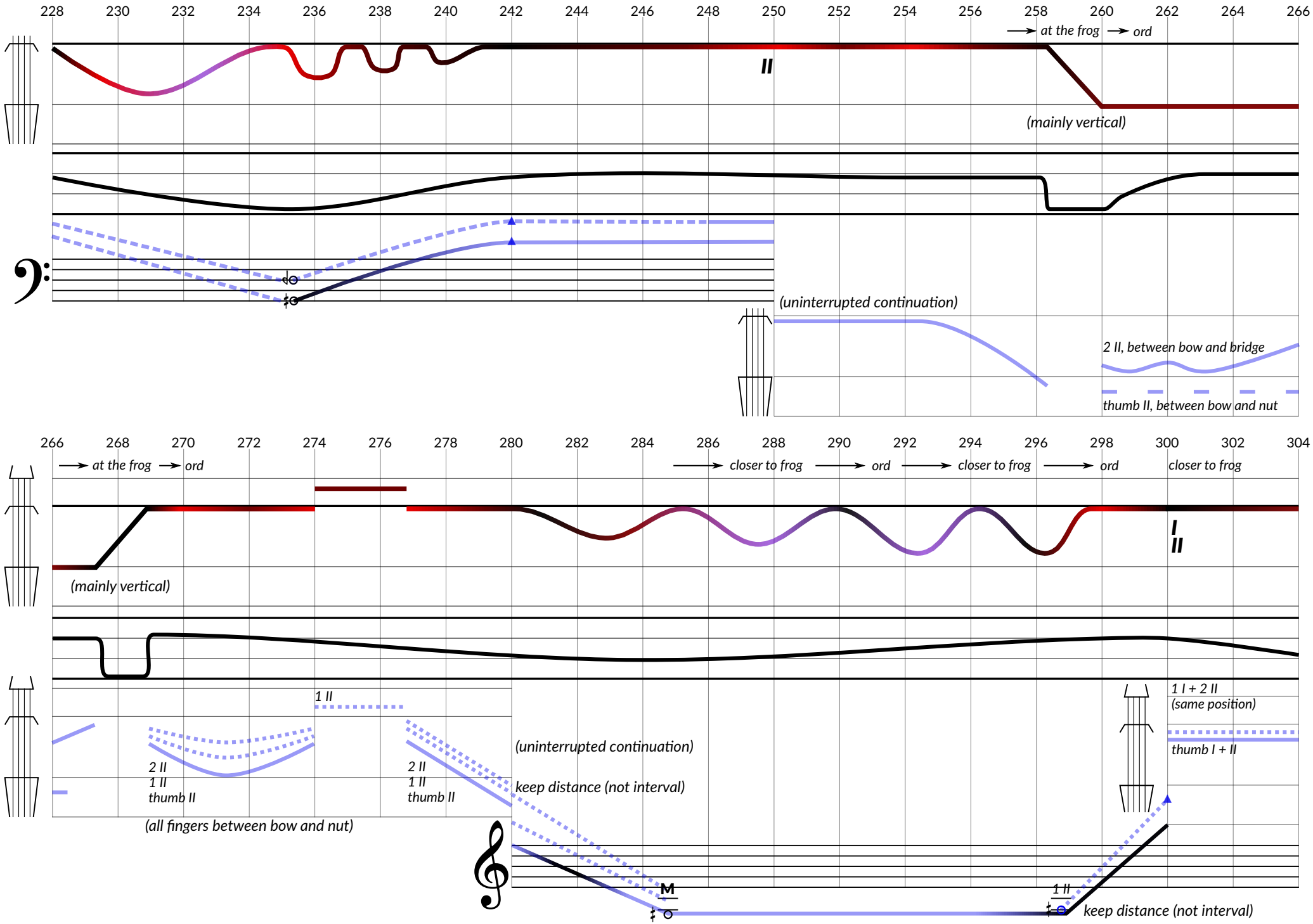
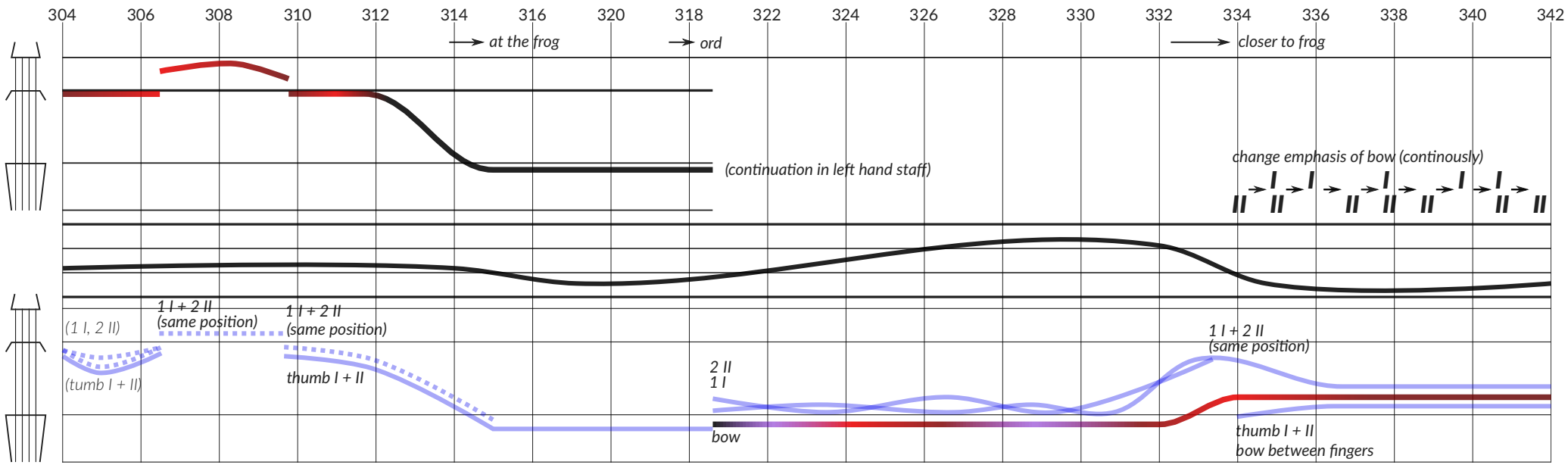


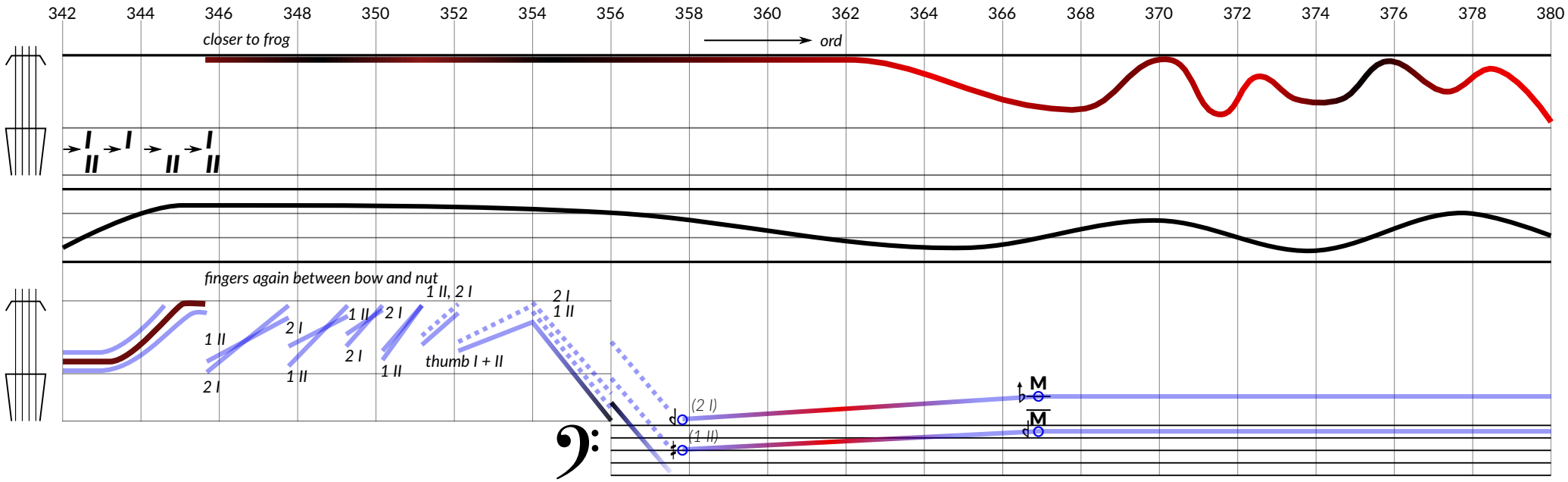

76 78 80 82 84 86 88 90 92 94 96 98 100 102 104 106 108 110 112 114
at the frog
III
IV
change to 3 and thumb
(1)
(2)
(2 III)
(1)
(2)
(1 IV)
(2)
(1)
3 III
thumb IV
2 III
(uninterrupted continuation)

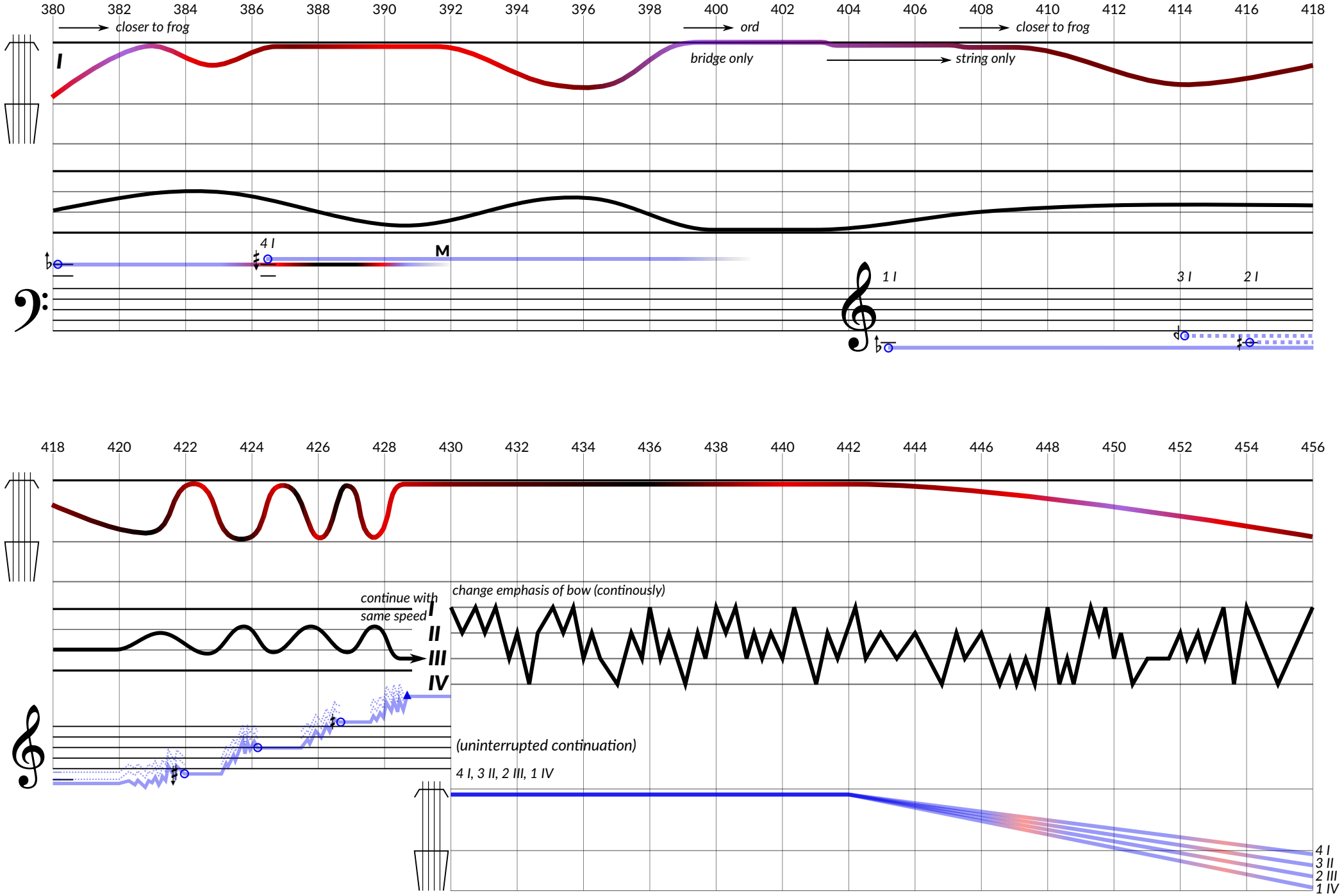

114 116 118 120 122 124 126 128 130 132 134 136 138 140 142 144 146 148 150 152
ord
bridge only
string only
III
1 III
M
M
(uninterrupted continuation)

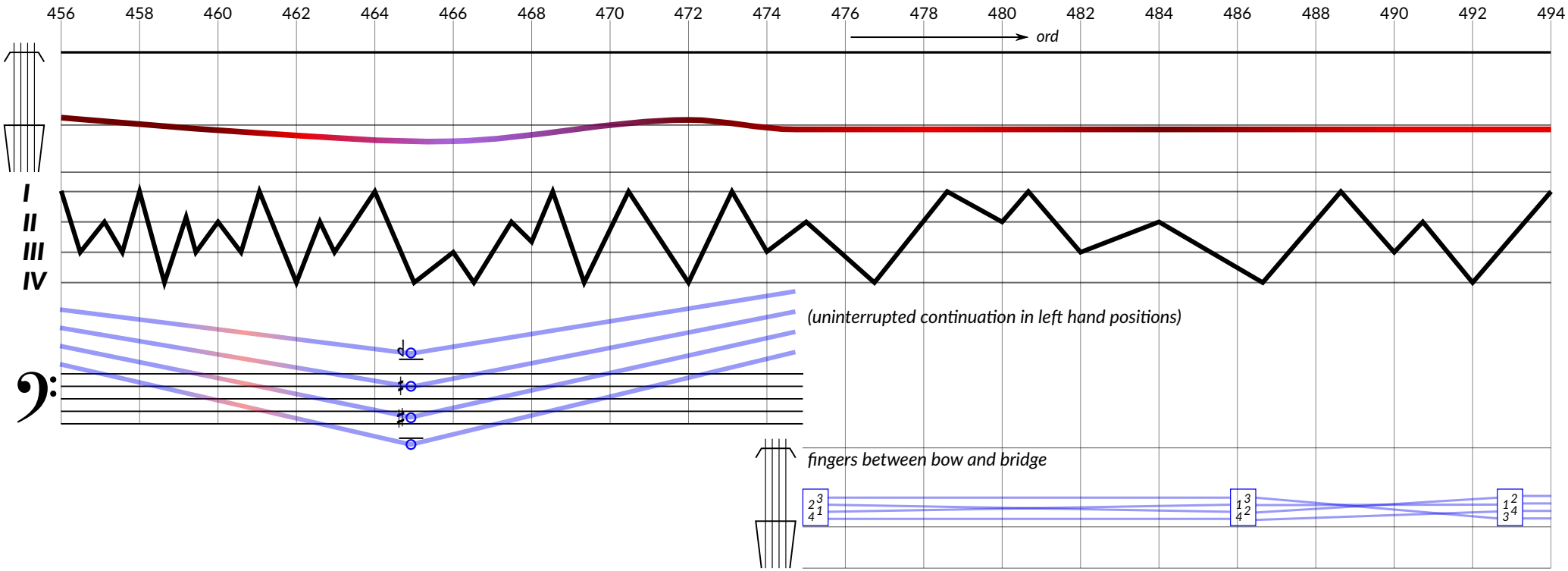

152 154 156 158 160 162 164 166 168 170 172 174 176 178 180 182 184 186 188 190
II
III
3 III
M
M
4 II
190 192 194 196 198 200 202 204 206 208 210 212 214 216 218 220 222 224 226 228
closer to the frog
(almost circular)
4 II
3 III
thumb III
keep distance (not interval)
between 3 and thumb
hammer-ons by 2 and 3 independently and quickly
2 II
3 III
2 II + 3 III (same position notated in one line)
(thumb III)
move as quickly as possible
behind the bridge
2 II
1 III
thumb III
keep distance (not interval)
between 1 and thumb
2 II
1 III

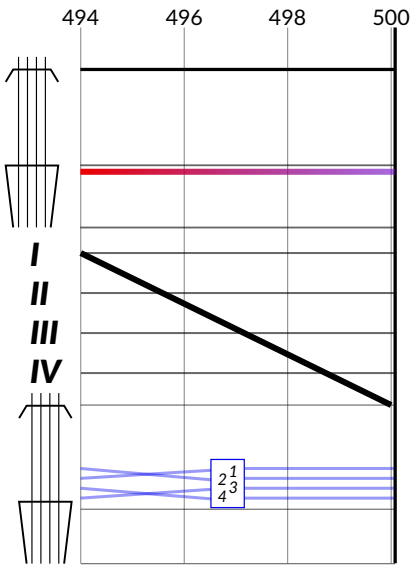

228 230 232 234 236 238 240 242 244 246 248 250 252 254 256 258 260 262 264 266
at the frog
ord
II
(mainly vertical)
(uninterrupted continuation)
2 II, between bow and bridge
thumb II, between bow and nut
266 268 270 272 274 276 278 280 282 284 286 288 290 292 294 296 298 300 302 304
at the frog
ord
closer to frog
ord
closer to frog
ord
closer to frog
I
II
(mainly vertical)
1 II
2 II
1 II
thumb II
(all fingers between bow and nut)
2 II
1 II
thumb II
(uninterrupted continuation)
keep distance (not interval)
1 I + 2 II
(same position)
thumb I + II
M
1 II
keep distance (not interval)


304 306 308 310 312 314 316 320 318 322 324 326 328 330 332 334 336 338 340 342
at the frog
ord
closer to frog
(continuation in left hand staff)
change emphasis of bow (continously)
(1 I, 2 II)
1 I + 2 II
(same position)
1 I + 2 II
(same position)
(tumb I + II)
thumb I + II
2 II
1 I
bow
1 I + 2 II
(same position)
thumb I + II
bow between fingers


342 344 346 348 350 352 354 356 358 360 362 364 366 368 370 372 374 376 378 380
closer to frog
ord
fingers again between bow and nut
1 II
2 I
2 I
1 II
2 I
1 II
2 I
1 II
1 II, 2 I
thumb I + II
2 I
1 II
(2 I)
(1 II)
M
M


380 382 384 386 388 390 392 394 396 398 400 402 404 406 408 410 412 414 416 418
closer to frog
ord
closer to frog
I
bridge only
string only
4 I
M
1 I
3 I
2 I
418 420 422 424 426 428 430 432 434 436 438 440 442 444 446 448 450 452 454 456
continue with same speed
I
II
III
IV
change emphasis of bow (continously)
(uninterrupted continuation)
4 I, 3 II, 2 III, 1 IV
4 I
3 II
2 III
1 IV





Berlin, August 2017