

ASTRALOGRAMY #1

CA. 130'

FOR 11 VIOLINS, VIOLA, CELLO, BASS, AND SHAKUHACHI

AIDAN PATRICK COOK

LICENSED UNDER CREATIVE COMMONS CC BY-SA (ATTRIBUTION-SHAREALIKE)

Performance notes

Notation

There are nine large sections in this piece, each of which employs distinct performance practices, and uses different notation. There is a note before each section describing the techniques and notation used in that section.

One notational device used several times treats the staff like an auxiliary staff, in which the vertical space of the staff is used to mean something other than pitch. A “tracking line” moves through the staff to control this parameter.

Timing and counting

Traditional tempi are very rare in this piece. Instead, the two primary vehicles for organizing time are seconds, and follow-the-leader. For sections which have a certain number of seconds per bar or staff, an electronic timer run by Max MSP is used, controlled by the shakuhachi player. This timer must be visible to the entire ensemble, but within reach of the shakuhachi player. Consider using two or more monitors. This patch is available for download at aidanpatrickcook.com/astralogramy1.

Tuning

This piece requires a scordatura tuning by the string players. The pitches they must tune to are spaced from each other with just intervals; they are not all equal-tempered pitches. The table to the right shows the pitches for each player to tune to. The diapason (that thing that is usually 440 Hz) should be matched to the shakuhachi’s Re-otsu pitch, in this case E4 (thus, A4 equals the frequency of this pitch times four thirds).

When tuning together, rather than one player at a time, the ensemble should tune all together one pitch at a time. Cello might begin with D, and everyone with a D would tune that pitch together. Then cello might proceed to G, and repeat with each of its strings. Violin 1 might then take over with the pitches it has that the cello does not have. The viola’s second string is the only pitch class that is not matched by any other player.

Discrete

This piece is extremely spacious. It both demands and cultivates tremendous patience from the performer. Transitions between the 9 large sections need never feel hurried. All players read from a score in performance except for the shakuhachi player. This is due

String #	Pitch	Deviation
Bass		
IV	B0	-20.5 cents
III	A1	0 cents
II	D2	0 cents
I	F#2	-20.5 cents
Cello		
IV	B1	-20.5 cents
III	F#2	-20.5 cents
II	D3	0 cents
I	G3	0 cents
Viola		
IV	B2	-20.5 cents
III	F#3	-20.5 cents
II	D#4	-41 cents
I	A4	0 cents
Violin 2		
IV	F#3	-20.5 cents
III	D4	0 cents
II	A4	0 cents
I	E5	0 cents
Violin 1		
IV	G3	0 cents
III	D4	0 cents
II	A4	0 cents
I	E5	0 cents

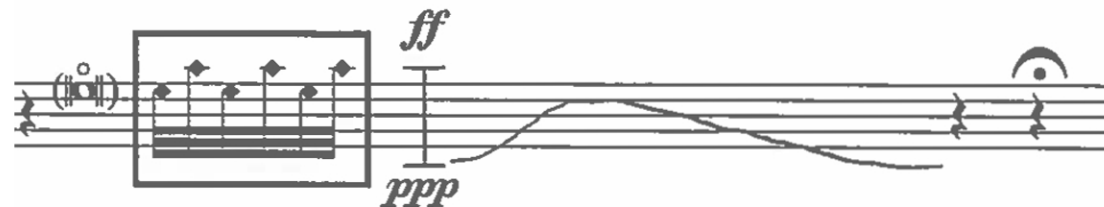
both to the musical material, which often isolates the shakuhachi and strings, and to the impracticality of synthesizing shakuhachi notation with western notation for protracted lengths of time.

❖ In this section, material given in boxes is repeated or iterated on at length.

❖ There is **no fixed tempo**. Instead, the strings should **follow the pace of the shakuhachi** line, matching with it vertically. This pace will fluctuate; do not expect to move through the bars evenly.

❖ The “tracking lines” that occupy the staves represent volume, which is the most dynamic parameter.

❖ The bottom line of the staff is *pp*, while the top line is *f*. Markings outside the staff thus extend to *ppp* and *ff*.



❖ All of the pitches given in boxes are **fingered notes for harmonics**, rather than sounding pitches. The note outside the box is played with the first finger, and should remain down always.

❖ For **solid-line boxes**, **repeat the given pattern** at a fast, even tempo until the next pattern is given. For **dashed-line boxes**, take the given fingerings and play them **quickly and erratically, in no fixed order** or tempo.

❖ Starting in bar 37, bow position instructions are replaced with an instruction to “isolate artifacts.” Artifacts are unintended consequences of an instrument’s physical production of sound. Interesting pitches and timbres will jump out of the instrument if the player explores different combinations of bow position, weight, and speed. Find as many of these sounds as you can during this section.

❖ At bar 84, the “tracking line” notation is replaced, leaving volume up to the player within a given range.

X Play freely, leading the strings, with a great deal of Ma.

Handwritten musical notation on a page with ten staves. The notation includes various symbols, accidentals, and dynamic markings. The first staff begins with a boxed 'X' and a fermata. The notation is dense and complex, with many notes and accidentals. The last staff ends with a boxed 'X' and a fermata.

When strings are ready, trigger A.

⌘

Astralogramy #1

Aidan Patrick Cook

x

on the bridge

8va (100)

I

violin 2

viola

shakuhachi

y

5

on the bridge

8va (100)

I

violin 2

mostly on the bridge

8va (100)

I

viola

sh

z

9

8va mostly on the bridge

(100)

violin 2

8va mostly on the bridge

(100)

viola

8va on the bridge

(100)

I

vcl

sh

13

vln 2

vla

vcl

sh

x

18

vln 2

vla

vcl

bs

sh

mostly on the bridge

on the bridge

z 22 near the bridge

vln 2

vla

vcl

bs

sh

26

vln 2

vla

vcl

bs

sh

[illegible]

39

vln 1

vln 2

vla

vcl

bs

sh

44

vln 1

vln 2

vla

vcl

bs

sh

X

near the bridge

loco (II)

loco (II)

I

y

χ

49

vln 1

vln 2

vla

vcl

bs

sh

53

vln 1

vln 2

vla

vcl

bs

sh

x

x

bow position free, isolate artifacts

57

vln 1

II

touch the string
at the nut

vln 2

II

vla

II

vcl

I

bs

I

sh

y

61

vln 1

I

vln 2

II

vla

I

vcl

II

bs

II

sh

65

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

47

48

49

50

51

52

53

54

55

56

57

58

59

60

61

62

63

64

65

66

67

68

69

70

71

72

73

74

75

76

77

78

79

80

81

82

83

84

85

86

87

88

89

90

91

92

93

94

95

96

97

98

99

100

101

102

103

104

105

106

107

108

109

110

111

112

113

114

115

116

117

118

119

120

121

122

123

124

125

126

127

128

129

130

131

132

133

134

135

136

137

138

139

140

141

142

143

144

145

146

147

148

149

150

151

152

153

154

155

156

157

158

159

160

161

162

163

164

165

166

167

168

169

170

171

172

173

174

175

176

177

178

179

180

181

182

183

184

185

186

187

188

189

190

191

192

193

194

195

196

197

198

199

200

201

202

203

204

205

206

207

208

209

210

211

212

213

214

215

216

217

218

219

220

221

222

223

224

225

226

227

228

229

230

231

232

233

234

235

236

237

238

239

240

241

242

243

244

245

246

247

248

249

250

251

252

253

254

255

256

257

258

259

260

261

262

263

264

265

266

267

268

269

270

271

272

273

274

275

276

277

278

279

280

281

282

283

284

285

286

287

288

289

290

291

292

293

294

295

296

297

298

299

300

301

302

303

304

305

306

307

308

309

310

311

312

313

314

315

316

317

318

319

320

321

322

323

324

325

326

327

328

329

330

331

332

333

334

335

336

337

338

339

340

341

342

343

344

345

346

347

348

349

350

351

352

353

354

355

356

357

358

359

360

361

362

363

364

365

366

367

368

369

370

371

372

373

374

375

376

377

378

379

380

381

382

383

384

385

386

387

388

389

390

391

392

393

394

395

396

397

398

399

400

401

402

403

404

405

406

407

408

409

410

411

412

413

414

415

416

417

418

419

420

421

422

423

424

425

426

427

428

429

430

431

432

433

434

435

436

437

438

439

440

441

442

443

444

445

446

447

448

449

450

451

452

453

454

455

456

457

458

459

460

461

462

463

464

465

466

467

468

469

470

471

472

473

474

475

476

477

478

479

480

481

482

483

484

485

486

487

488

489

490

491

492

493

494

495

496

497

498

499

500

501

502

503

504

505

506

507

508

509

510

511

512

513

514

515

516

517

518

519

520

521

522

523

524

525

526

527

528

529

530

531

532

533

534

535

536

537

538

539

540

541

542

543

544

545

546

547

548

549

550

551

552

553

554

555

556

557

558

559

560

561

562

563

564

565

566

567

568

569

570

571

572

573

574

575

576

577

578

579

580

581

582

583

584

585

586

587

588

589

590

591

592

593

594

595

596

597

598

599

600

601

602

603

604

605

606

607

608

609

610

611

612

613

614

615

616

617

618

619

620

621

622

623

624

625

626

627

628

629

630

631

632

633

634

635

636

637

638

639

640

641

642

643

644

645

646

647

648

649

650

651

652

653

654

655

656

657

658

659

660

661

662

663

664

665

666

667

668

669

670

671

672

673

674

675

676

677

678

679

680

681

682

683

684

685

686

687

688

689

690

691

692

693

694

695

696

697

698

699

700

701

702

703

704

705

706

707

708

709

710

711

712

713

714

715

716

717

718

719

720

721

722

723

724

725

726

727

728

729

730

731

732

733

734

735

736

737

738

739

740

741

742

743

744

745

746

747

748

749

750

751

752

753

754

755

756

757

758

759

760

761

762

763

764

765

766

767

768

769

770

771

772

773

774

775

776

777

778

779

780

781

782

783

784

785

786

787

788

789

790

791

792

793

794

795

796

797

798

799

800

801

802

803

804

805

806

807

808

809

810

811

812

813

814

815

816

817

818

819

820

821

822

823

824

825

826

827

828

829

830

831

832

833

834

835

836

837

838

839

840

841

842

843

844

845

846

847

848

849

850

851

852

853

854

855

856

857

858

859

860

861

862

863

864

865

866

867

868

869

870

871

872

873

874

875

876

877

878

879

880

881

882

883

884

885

886

887

888

889

890

891

892

893

894

895

896

897

898

899

900

901

902

903

904

905

906

907

908

909

910

911

912

913

914

915

916

917

918

919

920

921

922

923

924

925

926

927

928

929

930

931

932

933

934

935

936

937

938

939

940

941

942

943

944

945

946

947

948

949

950

951

952

953

954

955

956

957

958

959

960

961

962

963

964

965

966

967

968

969

970

971

972

973

974

975

976

977

978

979

980

981

982

983

984

985

986

987

988

989

990

991

992

993

994

995

996

997

998

999

1000

1001

1002

1003

1004

1005

1006

1007

1008

1009

1010

1011

1012

1013

1014

1015

1016

1017

1018

1019

1020

1021

1022

1023

1024

1025

1026

1027

1028

1029

1030

1031

1032

1033

1034

1035

1036

1037

1038

1039

1040

1041

1042

1043

1044

1045

1046

1047

1048

1049

1050

1051

1052

1053

1054

1055

1056

1057

1058

1059

1060

1061

1062

1063

1064

1065

1066

1067

1068

1069

1070

1071

1072

1073

1074

1075

1076

1077

1078

1079

1080

1081

1082

1083

1084

1085

1086

1087

1088

1089

1090

1091

1092

1093

1094

1095

1096

1097

1098

1099

1100

1101

1102

1103

1104

1105

1106

1107

1108

1109

1110

1111

1112

1113

1114

1115

1116

1117

1118

1119

1120

1121

1122

1123

1124

1125

1126

1127

1128

1129

1130

1131

1132

1133

1134

1135

1136

1137

1138

1139

1140

1141

1142

1143

1144

1145

1146

1147

1148

1149

1150

1151

1152

1153

1154

1155

1156

1157

1158

1159

1160

1161

1162

1163

1164

1165

1166

1167

1168

1169

1170

1171

1172

1173

1174

1175

1176

1177

1178

1179

1180

1181

1182

1183

1184

1185

1186

1187

1188

1189

1190

1191

1192

1193

1194

1195

1196

1197

1198

1199

1200

1201

1202

1203

1204

1205

1206

1207

1208

1209

1210

1211

1212

1213

1214

1215

1216

1217

1218

1219

1220

1221

1222

1223

1224

1225

1226

1227

1228

1229

1230

1231

1232

1233

1234

1235

1236

1237

1238

1239

1240

1241

1242

1243

1244

1245

1246

1247

1248

1249

1250

1251

1252

1253

1254

1255

1256

1257

1258

1259

1260

1261

1262

1263

1264

1265

1266

1267

1268

1269

1270

1271

1272

1273

1274

1275

1276

1277

1278

1279

1280

1281

1282

1283

1284

1285

1286

1287

1288

1289

1290

1291

1292

1293

1294

1295

1296

1297

1298

1299

1300

1301

1302

1303

1304

1305

1306

1307

1308

1309

1310

1311

1312

1313

1314

1315

1316

1317

1318

1319

1320

1321

1322

1323

1324

1325

1326

1327

1328

1329

1330

1331

1332

1333

1334

1335

1336

1337

1338

1339

1340

1341

1342

1343

1344

1345

1346

1347

1348

1349

1350

1351

1352

1353

1354

1355

1356

1357

1358

1359

1360

1361

1362

1363

1364

1365

1366

1367

1368

1369

1370

1371

1372

1373

1374

1375

1376

1377

1378

1379

1380

1381

1382

1383

1384

1385

1386

1387

1388

1389

1390

1391

1392

1393

1394

1395

1396

1397

1398

1399

1400

1401

1402

1403

1404

1405

1406

1407

1408

1409

1410

1411

1412

1413

1414

1415

1416

1417

1418

1419

1420

1421

1422

1423

1424

1425

1426

1427

1428

1429

1430

1431

1432

1433

1434

1435

1436

1437

1438

1439

1440

1441

1442

1443

1444

1445

1446

1447

1448

1449

1450

1451

1452

1453

1454

1455

1456

1457

1458

1459

1460

1461

1462

1463

1464

1465

1466

1467

1468

1469

1470

1471

1472

1473

1474

1475

1476

1477

1478

1479

1480

1481

1482

1483

1484

1485

1486

1487

1488

1489

1490

1491

1492

1493

1494

1495

1496

1497

1498

76

y

x

vln 1

vln 2

vla

vcl

bs

sh

II

III

II

I

I

81

Dynamic free in given range

z Explore the sound, responding to Shakuhachi

vln 1

vln 2

vla

vcl

bs

sh

II

III

III

I

I

86

vln 1

vln 2

vla

vcl

bs

sh

86 87 88 89 90 91

strings proceed
directly into $\mathcal{A}$
(no rush)

92

vln 1

vln 2

vla

vcl

bs

sh

92 93 94 95 96 97

A

❖ The **shakuhachi and string quintet are entirely independent** of each other in this section. These notes apply to the strings.

❖ Each bar lasts for 50 seconds, except for the transitional rest bars, which each last 20 seconds.

❖ The number above each note/rest is the exact second within the bar at which it should begin. Any note/rest sustains until the next action.

❖ Most notes in this section are natural harmonics. **Each harmonic is accompanied by both the string (in roman numerals) and the partial number.** (in Arabic numerals). For instance, a fifth-partial F# on the violin's D string is marked III:5.

❖ The entrance of the shakuhachi is staggered by around 2 minutes from the strings. It is likely that the shakuhachi will still have material left for *A* when the strings finish. In this case, **strings should wait for the shakuhachi to finish.** The player will then cue *M*.

A musical staff diagram illustrating string harmonics. The staff has a treble clef and a key signature of one sharp (F#). Three specific points are marked on the staff with time indicators above them: 0", 21", and 27". Below the staff, the corresponding string and partial numbers are listed: I:5 under the 21" mark and II:7 under the 27" mark. The 0" mark is at the beginning of the staff, corresponding to the open D string. The 21" mark corresponds to the fifth partial of the D string (F#). The 27" mark corresponds to the seventh partial of the E string (F#).

$\mathcal{A}$

adapted from Rogen-Ji Taki-Ochi

Wait two cycles of 50", then begin.

When finished, calmly trigger M

When finished, calmly trigger $\mathcal{M}$

Violin 1 (vln 1): 50", 9", 39", 20", 8"

Violin 2 (vln 2): 8", 3", 13"

Viola (vln): 5", 7"

Violoncello (vcl): 22", 2"

Bass (bs): 43", 10"

Measure 1: I:3, I:4, III:4, I:3, I:9

Measure 2: I:3, I:4, III:3, I:3, I:9

b 50''

8va-----, 3" 11

vln 1 III:10 3" 20" 13"

vln 2 I:3 5"

vla 2" I:2 9"

vcl 1" 7" 17"

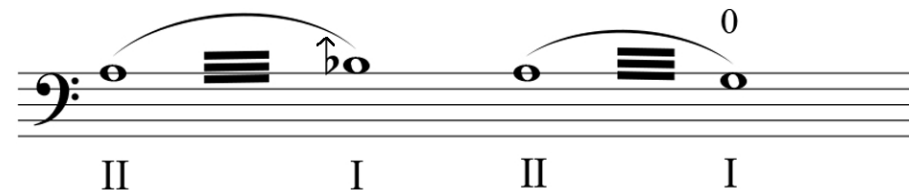
II:4 I:6

bs 39" 16"

I:7

wait for shakuhachi
to cue $\mathcal{M}$

M



- ❖ Each bar in this section lasts for 9 seconds.
- ❖ Tremolos in this section are **always across two strings**. Diads on a single string are notated as trills.
- ❖ This section employs 5-limit just intonation. **Bs, E flats, and Fs in this section are all raised by** a syntonic comma, effectively **20.5 cents** from their equal tempered counterparts. This is notated with an **upwards arrow attached to the accidentals**. This deviation should be achievable by ear, as it will create **just thirds and fifths within most triads**. It may take some getting used to in cases where the performer's own part includes an altered note as a member of a major or minor second, or in cases of a raised F beside an unaltered C. Preserve the deviation in these cases.
- ❖ Rhythmic notation in each bar is relative. Don't be too concerned about dividing the 9" bar into 4 equal parts.
- ❖ The **bass player** is instructed to improvise expressive melodic fragments using a given ordered sequence of pitches. **Use dynamics, articulation, rhythm, ornamentation**, and any other parameter to make these phrases expressive and unique.
- ❖ Bass phrases begin at the point in the bar where the box begins, as opposed to where the line begins.
- ❖ The shakuhachi improvises freely, emphasizing open-hole notes, the pitches of a B minor pentatonic.

M

1 bar = 9" no vibrato

violin 1

violin 2

viola

cello

double bass

shakuhachi

III
always *mp*

II

IV
always *mp*

III

I
always *mp*

II

5

vln 1

vln 2

vla

vcl

bs

sh

0

III

IV

IV

III

II

I

II

I

II

I

Improvise an expressive melody of a duration within the given range, proceeding through the given notes, in order, each once only.

5"-10"

7"-14"

17

M

21

musical score for measures 17-20

instruments: vln 1, vln 2, vla, vcl, bs, sh

fingerings: 0, III, II, IV, III, II, III, II, IV, III, III, II, III, II

bowings: 5"-10", 8"-16"

sh: 2

21

musical score for measures 21-24

instruments: vln 1, vln 2, vla, vcl, bs, sh

fingerings: IV, III, 0, III, II, III, IV, III, 0, III, II, III, IV, III

bowings: 12"-17", 6"-9"

sh: 2

25

0

vln 1

vln 2

vla

vcl

bs

sh

2

2

IV

0

II

III

III

IV

0

II

III

III

IV

0

II

III

2

2

29

vln 1

vln 2

vla

vcl

bs

sh

8"-13"

5"-9"

III

II

2

2

III

IV

III

IV

IV

III

III

II

2

2

33

M

23

musical score for measures 33-36

instruments: vln 1, vln 2, vla, vcl, bs, sh

measure 33: vln 1 has trills on G4 and E5. vln 2 has a triplet of eighth notes (G4, A4, B4) with fingerings III, IV. vla has a whole rest. vcl has a triplet of eighth notes (G3, A3, B3) with fingerings II, I. bs has a whole rest. sh has a whole rest.

measure 34: vln 1 has a trill on G4. vln 2 has a triplet of eighth notes (G4, A4, B4) with fingerings III, IV. vla has a whole rest. vcl has a triplet of eighth notes (G3, A3, B3) with fingerings II, I. bs has a whole rest. sh has a whole rest.

measure 35: vln 1 has a trill on G4. vln 2 has a whole rest. vla has a triplet of eighth notes (G4, A4, B4) with fingerings IV, III. vcl has a triplet of eighth notes (G3, A3, B3) with fingerings II, I. bs has a whole rest. sh has a whole rest.

measure 36: vln 1 has a trill on G4. vln 2 has a whole rest. vla has a whole rest. vcl has a triplet of eighth notes (G3, A3, B3) with fingerings II, I. bs has a whole rest. sh has a whole rest.

37

musical score for measures 37-40

instruments: vln 1, vln 2, vla, vcl, bs, sh

measure 37: vln 1 has a triplet of eighth notes (G4, A4, B4) with fingerings II, III. vln 2 has a whole rest. vla has a triplet of eighth notes (G4, A4, B4) with fingerings IV, III, IV, III. vcl has a triplet of eighth notes (G3, A3, B3) with fingerings II, I. bs has a triplet of eighth notes (G3, A3, B3) with fingerings II, I. sh has a whole rest.

measure 38: vln 1 has a whole rest. vln 2 has a whole rest. vla has a triplet of eighth notes (G4, A4, B4) with fingerings IV, III, IV, III. vcl has a triplet of eighth notes (G3, A3, B3) with fingerings II, I. bs has a triplet of eighth notes (G3, A3, B3) with fingerings II, I. sh has a whole rest.

measure 39: vln 1 has a triplet of eighth notes (G4, A4, B4) with fingerings II, III. vln 2 has a whole rest. vla has a whole rest. vcl has a triplet of eighth notes (G3, A3, B3) with fingerings II, I. bs has a triplet of eighth notes (G3, A3, B3) with fingerings II, I. sh has a whole rest.

measure 40: vln 1 has a triplet of eighth notes (G4, A4, B4) with fingerings II, III. vln 2 has a whole rest. vla has a whole rest. vcl has a triplet of eighth notes (G3, A3, B3) with fingerings II, I. bs has a triplet of eighth notes (G3, A3, B3) with fingerings II, I. sh has a whole rest.

musical score for measures 41-44

instruments: vln 1, vln 2, vla, vcl, bs, sh

measure 41: vln 1 (III, IV), vln 2 (III, II), vla (0), vcl (II, III), bs (5"-8"), sh (2)

measure 42: vln 1 (IV, III, III, II), vln 2 (III, II), vla (IV, III), vcl (II, III), bs (0), sh (2)

measure 43: vln 1 (III, II), vln 2 (IV, III), vla (IV, III), vcl (III, II), bs (0), sh (2)

measure 44: vln 1 (III, II), vln 2 (III, II), vla (II, III), vcl (III, II), bs (0), sh (2)

musical score for measures 45-48

instruments: vln 1, vln 2, vla, vcl, bs, sh

measure 45: vln 1 (II, III, III, II), vln 2 (0), vla (III, IV), vcl (III, II), bs (0), sh (2)

measure 46: vln 1 (IV, III), vln 2 (III, II), vla (III, IV), vcl (0), bs (0), sh (2)

measure 47: vln 1 (IV, III), vln 2 (III, II), vla (III, IV), vcl (0), bs (0), sh (2)

measure 48: vln 1 (IV, III), vln 2 (III, II), vla (0), vcl (0), bs (7"-11"), sh (2)

Violin 1

Violin 2

Viola

Violoncello

Bassoon

Soloist

2

2

5"-7"

4"-7"

53

shakuhachi
proceeds alone

53

shakuhachi
proceeds alone

vln 1

vln 2

vla

vcl

bs

sh

5"-9"

4"-6"

2

2

B

❖ The **shakuhachi and string quintet are entirely independent** of each other in this section.

These notes apply to the strings.

❖ Each bar lasts for 50 seconds, except for the transitional rest bars, which each last 20 seconds.

❖ The number above each note/rest is the exact second within the bar at which it should begin. Any note/rest sustains until the next action.

❖ Virtually all notes in this section are natural harmonics. **Each harmonic is accompanied by both the string (in roman numerals) and the partial number.** (in Arabic numerals).
For instance, a fifth-partial F# on the violin's D string is marked III:5.



❖ The shakuhachi begins several minutes before the strings are to enter. **The shakuhachi player will cue the strings to enter using the electronic timer**, activating a 5 second countdown which cues the beginning of the section.

❖ The written material for the strings should end before the shakuhachi is finished. At this time, strings should wait around 1 minute, or until the shakuhachi is finished (whichever comes first), and tune their strings. See the front of the score for instructions on tuning.

B

b 50"

8^{va} sempre 15"

26"

37"

48"

c 50"

9"

20"

31"

42"

violin 1

III:5
always *mp*

I:5

III:6

III:5

I:5

I:3

I:2

I:5

9"

18"

27"

36"

45"

4"

13"

22"

31"

40"

49"

violin 2

III:4
always *mp*

III:3

I:3

IV:4

II:4

III:4

IV:3

II:4

IV:3

III:4

0"

21"

28"

35"

42"

49"

6"

13"

20"

27"

34"

41"

48"

viola

I:2
always *mp*

III:4

IV:4

IV:4

IV:7

IV:8

IV:7

IV:9

IV:8

IV:7

IV:9

6"

22"

30"

38"

46"

4"

12"

20"

28"

36"

44"

cello

I:5
always *mp*

III:9

I:6

I:5

III:9

II:4

III:7

III:9

II:4

10"

20"

30"

40"

0"

10"

20"

30"

40"

double bass

II:8
always *mp*

II:6

II:9

II:8

I:6

II:4

I:6

II:6

a 50"

3"

14"

25"

36"

47"

20"

8"

vln 1

III:8

III:5

III:6

III:7

III:8

8"

17"

26"

35"

44"

3"

vln 2

II:2

I:3

I:2

I:3

5"

12"

19"

26"

33"

40"

47"

4"

vla

II:5

III:4

III:7

II:5

III:7

2"

10"

18"

26"

34"

42"

0"

vcl

I:4

I:3

I:5

I:4

I:5

0"

10"

20"

30"

40"

0"

bs

III:9

III:6

III:9

III:8

III:7

50" 10" 17" 24" 31" 38" 45" 50" 2" 9" 16" 23" 30" 37" 44"

vln 1 I:5 II:8 III:7 I:5 II:8 III:9 III:10 III:8 III:10 III:9 III:8

vln 2 8^{va} sempre 1" 9" 17" 25" 33" 41" 49" 7" 15" 23" 31" 39" 47"

vla III:5 III:8 I:3 III:5 III:8 III:5 I:4 I:3 I:4 III:5 I:4

vcl I:2 I:3 III:8 I:3 I:2 II:5 I:4 I:3 II:5 I:4

bs 0" 11" 22" 33" 44" 5" 16" 27" 38" 49"

II:5 II:4 II:6 II:5 II:6 II:8 II:7 II:8 II:4 II:5

The image displays the first system of a musical score for 'The Great Gatsby' by John Williams. The score is written for five instruments: Violin 1 (vln 1), Violin 2 (vln 2), Viola (vla), Violoncello (vcl), and Bass (bs). The key signature is one sharp (F#), and the time signature is 4/4. The score includes various musical notations, including notes, rests, and dynamic markings. The first measure of the system is marked with a 'c' in a box, indicating a common time signature. The score is divided into two systems by a double bar line. The first system contains measures 1 through 5, and the second system contains measures 6 through 10. The score includes various performance markings, such as dynamics (e.g., $II:8$, $I:5$, $III:8$, $I:3$, $I:2$, $III:5$, $II:6$, $II:4$, $III:6$, $II:9$, $II:6$, $I:9$, $II:6$) and articulation (e.g., $5''$, $13''$, $21''$, $29''$, $37''$, $45''$, $3''$, $5''$, $14''$, $23''$, $32''$, $41''$, $0''$, $4''$, $10''$, $21''$, $32''$, $43''$, $4''$). The score is written in a standard musical notation style, with notes, rests, and dynamic markings clearly visible. The first system of the score is marked with a 'c' in a box, indicating a common time signature. The score is divided into two systems by a double bar line. The first system contains measures 1 through 5, and the second system contains measures 6 through 10. The score includes various performance markings, such as dynamics (e.g., $II:8$, $I:5$, $III:8$, $I:3$, $I:2$, $III:5$, $II:6$, $II:4$, $III:6$, $II:9$, $II:6$, $I:9$, $II:6$) and articulation (e.g., $5''$, $13''$, $21''$, $29''$, $37''$, $45''$, $3''$, $5''$, $14''$, $23''$, $32''$, $41''$, $0''$, $4''$, $10''$, $21''$, $32''$, $43''$, $4''$). The score is written in a standard musical notation style, with notes, rests, and dynamic markings clearly visible.

B

C

a

The image displays a musical score for the piece "The Rose Tree". The score is written for five instruments: Violin 1 (vln 1), Violin 2 (vln 2), Viola (vla), Violoncello (vcl), and Bass (bs). The score is organized into two systems, labeled 'c' and 'a', each with a duration of 50 seconds. The notation includes pitch contours, fingerings, and bowings for each instrument. The score is divided into two systems, 'c' and 'a', each with a duration of 50 seconds. The notation includes pitch contours, fingerings, and bowings for each instrument.

b 50''

4'' 11'' 18'' 25'' 32'' 39'' 46'' 20'' 3''

vln 1

III:7 III:10 I:5 III:7 III:7 I:5

vln 2

III:6 III:8 III:7 III:6

vla

III:8 III:9 IV:7 III:8 IV:7

vcl

I:3 I:6 I:5 I:3 I:5 II:7

bs

II:6 II:5 II:6 II:5 II:7

32

a 50" 4" 14" 24" 34" 44" **b** 50" 4" 14" 24" 34" 44"

vln I

I:4 I:6 III:7 I:6 I:4 II:8 III:10 III:7 III:10

3" 11" 19" 27" 35" 43" 1" 9" 17" 25" 33" 41" 49"

vln 2

III:8 III:7 III:6 III:7 III:8 III:7 III:8 I:5 III:8 III:8 III:7

5" 12" 19" 26" 33" 40" 47" 4" 11" 18" 25" 32" 39" 46"

vla

I:2 IV:4 III:4 III:4 I:2 III:4 IV:8 IV:7 IV:8 IV:6 IV:8

5" 14" 23" 32" 41" 0" 9" 18" 27" 36" 45"

vcl

II:5 II:7 II:8 II:7 III:8 III:9 II:7 III:9 III:8 III:9

7" 18" 29" 40" 1" 12" 23" 34" 45"

bs

III:7 III:6 II:7 III:7 II:6 II:7 II:8 II:6 II:7

Key signature: one sharp (F#). Time signature: common time (C).

First system (measures 19-24):

- vln 1:** Measures 19-24. Notes: G4 (19), A4 (20), B4 (21), C5 (22), D5 (23), E5 (24). Rest: 20".
- vln 2:** Measures 19-24. Notes: F#4 (19), G4 (20), A4 (21), B4 (22), C5 (23), D5 (24). Rest: 20".
- vla:** Measures 19-24. Notes: E4 (19), F#4 (20), G4 (21), A4 (22), B4 (23), C5 (24). Rest: 20".
- vcl:** Measures 19-24. Notes: D4 (19), E4 (20), F#4 (21), G4 (22), A4 (23), B4 (24). Rest: 20".
- bs:** Measures 19-24. Notes: C3 (19), D3 (20), E3 (21), F#3 (22), G3 (23), A3 (24). Rest: 20".

Second system (measures 25-30):

- vln 1:** Measures 25-30. Notes: E5 (25), D5 (26), C5 (27), B4 (28), A4 (29), G4 (30). Rest: 20".
- vln 2:** Measures 25-30. Notes: D5 (25), C5 (26), B4 (27), A4 (28), G4 (29), F#4 (30). Rest: 20".
- vla:** Measures 25-30. Notes: C5 (25), B4 (26), A4 (27), G4 (28), F#4 (29), E4 (30). Rest: 20".
- vcl:** Measures 25-30. Notes: B4 (25), A4 (26), G4 (27), F#4 (28), E4 (29), D4 (30). Rest: 20".
- bs:** Measures 25-30. Notes: A3 (25), G3 (26), F#3 (27), E3 (28), D3 (29), C3 (30). Rest: 20".

Third system (measures 31-36):

- vln 1:** Measures 31-36. Notes: F#4 (31), G4 (32), A4 (33), B4 (34), C5 (35), D5 (36). Rest: 20".
- vln 2:** Measures 31-36. Notes: E4 (31), F#4 (32), G4 (33), A4 (34), B4 (35), C5 (36). Rest: 20".
- vla:** Measures 31-36. Notes: D4 (31), E4 (32), F#4 (33), G4 (34), A4 (35), B4 (36). Rest: 20".
- vcl:** Measures 31-36. Notes: C5 (31), B4 (32), A4 (33), G4 (34), F#4 (35), E4 (36). Rest: 20".
- bs:** Measures 31-36. Notes: B4 (31), A4 (32), G4 (33), F#4 (34), E4 (35), D4 (36). Rest: 20".

Fourth system (measures 37-42):

- vln 1:** Measures 37-42. Notes: D5 (37), C5 (38), B4 (39), A4 (40), G4 (41), F#4 (42). Rest: 20".
- vln 2:** Measures 37-42. Notes: C5 (37), B4 (38), A4 (39), G4 (40), F#4 (41), E4 (42). Rest: 20".
- vla:** Measures 37-42. Notes: B4 (37), A4 (38), G4 (39), F#4 (40), E4 (41), D4 (42). Rest: 20".
- vcl:** Measures 37-42. Notes: A4 (37), G4 (38), F#4 (39), E4 (40), D4 (41), C4 (42). Rest: 20".
- bs:** Measures 37-42. Notes: G3 (37), F#3 (38), E3 (39), D3 (40), C3 (41), B2 (42). Rest: 20".

Key signature change: one flat (Bb) at measure 43.

Fifth system (measures 43-48):

- vln 1:** Measures 43-48. Notes: E5 (43), D5 (44), C5 (45), B4 (46), A4 (47), G4 (48). Rest: 20".
- vln 2:** Measures 43-48. Notes: D5 (43), C5 (44), B4 (45), A4 (46), G4 (47), F#4 (48). Rest: 20".
- vla:** Measures 43-48. Notes: C5 (43), B4 (44), A4 (45), G4 (46), F#4 (47), E4 (48). Rest: 20".
- vcl:** Measures 43-48. Notes: B4 (43), A4 (44), G4 (45), F#4 (46), E4 (47), D4 (48). Rest: 20".
- bs:** Measures 43-48. Notes: A3 (43), G3 (44), F#3 (45), E3 (46), D3 (47), C3 (48). Rest: 20".

Sixth system (measures 49-54):

- vln 1:** Measures 49-54. Notes: F#4 (49), G4 (50), A4 (51), B4 (52), C5 (53), D5 (54). Rest: 20".
- vln 2:** Measures 49-54. Notes: E4 (49), F#4 (50), G4 (51), A4 (52), B4 (53), C5 (54). Rest: 20".
- vla:** Measures 49-54. Notes: D4 (49), E4 (50), F#4 (51), G4 (52), A4 (53), B4 (54). Rest: 20".
- vcl:** Measures 49-54. Notes: C5 (49), B4 (50), A4 (51), G4 (52), F#4 (53), E4 (54). Rest: 20".
- bs:** Measures 49-54. Notes: B4 (49), A4 (50), G4 (51), F#4 (52), E4 (53), D4 (54). Rest: 20".

Seventh system (measures 55-60):

- vln 1:** Measures 55-60. Notes: D5 (55), C5 (56), B4 (57), A4 (58), G4 (59), F#4 (60). Rest: 20".
- vln 2:** Measures 55-60. Notes: C5 (55), B4 (56), A4 (57), G4 (58), F#4 (59), E4 (60). Rest: 20".
- vla:** Measures 55-60. Notes: B4 (55), A4 (56), G4 (57), F#4 (58), E4 (59), D4 (60). Rest: 20".
- vcl:** Measures 55-60. Notes: A4 (55), G4 (56), F#4 (57), E4 (58), D4 (59), C4 (60). Rest: 20".
- bs:** Measures 55-60. Notes: G3 (55), F#3 (56), E3 (57), D3 (58), C3 (59), B2 (60). Rest: 20".

Key signature change: one sharp (F#) at measure 61.

Eighth system (measures 61-66):

- vln 1:** Measures 61-66. Notes: E5 (61), D5 (62), C5 (63), B4 (64), A4 (65), G4 (66). Rest: 20".
- vln 2:** Measures 61-66. Notes: D5 (61), C5 (62), B4 (63), A4 (64), G4 (65), F#4 (66). Rest: 20".
- vla:** Measures 61-66. Notes: C5 (61), B4 (62), A4 (63), G4 (64), F#4 (65), E4 (66). Rest: 20".
- vcl:** Measures 61-66. Notes: B4 (61), A4 (62), G4 (63), F#4 (64), E4 (65), D4 (66). Rest: 20".
- bs:** Measures 61-66. Notes: A3 (61), G3 (62), F#3 (63), E3 (64), D3 (65), C3 (66). Rest: 20".

Ninth system (measures 67-72):

- vln 1:** Measures 67-72. Notes: F#4 (67), G4 (68), A4 (69), B4 (70), C5 (71), D5 (72). Rest: 20".
- vln 2:** Measures 67-72. Notes: E4 (67), F#4 (68), G4 (69), A4 (70), B4 (71), C5 (72). Rest: 20".
- vla:** Measures 67-72. Notes: D4 (67), E4 (68), F#4 (69), G4 (70), A4 (71), B4 (72). Rest: 20".
- vcl:** Measures 67-72. Notes: C5 (67), B4 (68), A4 (69), G4 (70), F#4 (71), E4 (72). Rest: 20".
- bs:** Measures 67-72. Notes: B4 (67), A4 (68), G4 (69), F#4 (70), E4 (71), D4 (72). Rest: 20".

Tenth system (measures 73-78):

- vln 1:** Measures 73-78. Notes: D5 (73), C5 (74), B4 (75), A4 (76), G4 (77), F#4 (78). Rest: 20".
- vln 2:** Measures 73-78. Notes: C5 (73), B4 (74), A4 (75), G4 (76), F#4 (77), E4 (78). Rest: 20".
- vla:** Measures 73-78. Notes: B4 (73), A4 (74), G4 (75), F#4 (76), E4 (77), D4 (78). Rest: 20".
- vcl:** Measures 73-78. Notes: A4 (73), G4 (74), F#4 (75), E4 (76), D4 (77), C4 (78). Rest: 20".
- bs:** Measures 73-78. Notes: G3 (73), F#3 (74), E3 (75), D3 (76), C3 (77), B2 (78). Rest: 20".

Eleventh system (measures 79-84):

- vln 1:** Measures 79-84. Notes: E5 (79), D5 (80), C5 (81), B4 (82), A4 (83), G4 (84). Rest: 20".
- vln 2:** Measures 79-84. Notes: D5 (79), C5 (80), B4 (81), A4 (82), G4 (83), F#4 (84). Rest: 20".
- vla:** Measures 79-84. Notes: C5 (79), B4 (80), A4 (81), G4 (82), F#4 (83), E4 (84). Rest: 20".
- vcl:** Measures 79-84. Notes: B4 (79), A4 (80), G4 (81), F#4 (82), E4 (83), D4 (84). Rest: 20".
- bs:** Measures 79-84. Notes: A3 (79), G3 (80), F#3 (81), E3 (82), D3 (83), C

While shakuhachi continues, wait 50 seconds, then tune all strings again. Proceed to Y once both Shakuhachi and strings are finished.

❖ This section operates **similarly to X**: boxes provide a note to be sustained, while the string players follow the pace of the shakuhachi.

❖ In this section, the **line specifically conveys bow pressure**, though volume should be proportional to pressure.

❖ The bottom of the line's range corresponds to a **flautando on the very edge of the bow**, playing with a single hair. The top of the range corresponds to **maximum overpressure**.



❖ Varying vibrato is also employed in this section. The four levels are **senza vibrato (s.v)**, **poco vibrato (p.v.)**, **ordinary vibrato (vib.)**, and **molto vibrato (m.v.)**.

❖ The hairpins over the staff are connected only with vibrato; they do not affect volume.

❖ While applying high bow pressure near the bridge, it should be possible to bring out different higher partials of the string, with a multiphonic effect. This is what the performer is invited to “explore” when the tracking line is replaced at measure 24.

Y Play freely, leading the strings, with a great deal of Ma.

[illegible]

When strings are ready, trigger $\mathcal{N}$.

γ

y

violin 1

violin 2

viola

cello

double bass

shakuhachi

adjacent to the bridge
s.v.

III

adjacent to the bridge
s.v.

I

x

5

vln 1

vln 2

vla

vcl

bs

sh

adjacent to the bridge
s.v.

II

I

I

z

γ

10

vln 1

vln 2

vla

vcl

bs

sh

adjacent to the bridge
s.v.

II

II

III

II

p.v.

s.v.

p.v.

s.v.

p.v.

s.v.

p.v.

s.v.

x

15

vln 1

vln 2

vla

vcl

bs

sh

adjacent to the bridge
s.v.

I

II

II

I

III

p.v.

s.v.

p.v.

s.v.

p.v.

s.v.

p.v.

s.v.

vib.

γ

z as much weight as possible.
near the bridge. explore.

37

20

vln 1

vln 2

vla

vcl

bs

sh

p.v.

s.v.

p.v.

s.v.

p.v.

s.v.

p.v.

vib.

II

III

III

II

III

25

vln 1

vln 2

vla

vcl

bs

sh

p.v.

s.v.

p.v.

s.v.

p.v.

s.v.

vib.

vib.

31 m.v.

vln 1

vln 2

vla

vcl

bs

sh

II

IV

IV

IV

IV

36

vln 1

vln 2

vla

vcl

bs

sh

γ

x

41

vln 1

vln 2

vla

vcl

bs

sh

y

47

vln 1

vln 2

vla

vcl

bs

sh

40

52

z

γ

vib.

p.v.

vib.

vln 1

vln 2

vla

vcl

bs

sh

57

vln 1

vln 2

vla

vcl

bs

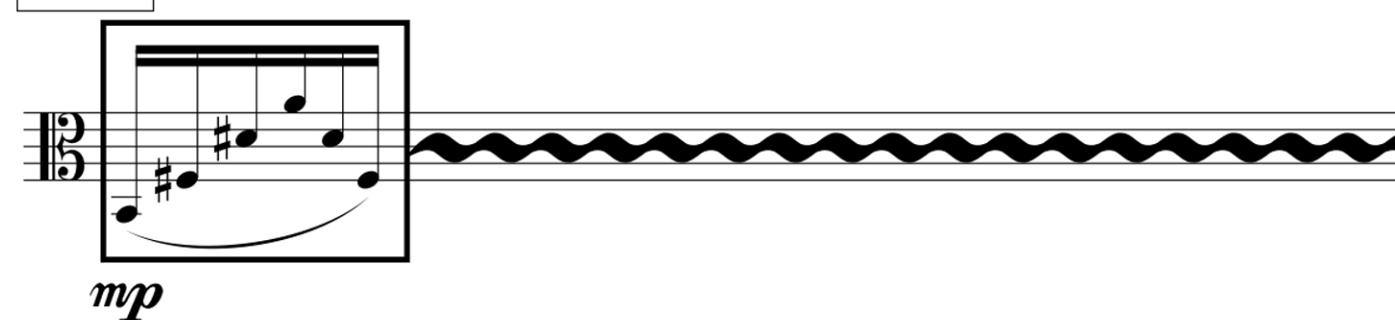
sh

proceed directly
to $\mathcal{N}$ (no rush)

$\mathcal{N}$

- ❖ This section is performed **entirely on open strings**. Always **allow strings to resonate**.
- ❖ The boxes contain an **ordered pattern to be repeated** as long as the zigzag line continues, or until a new pattern is given.
- ❖ Each system has two time indications. **The first**, in a box, is the **total elapsed time** in $\mathcal{N}$ at which **the system begins**. **The second** is the **total duration of that system**.
- ❖ **Dynamic shifts** must be **extremely gradual** when marked.
- ❖ The sustain between the five and twelve minute marks is quite physically demanding. String players may well need to **put their bow arm down temporarily** to relieve muscular exhaustion. Try to **avoid having two players resting simultaneously**, or resting for more than 15 seconds at a time.

3:30 60"



mp

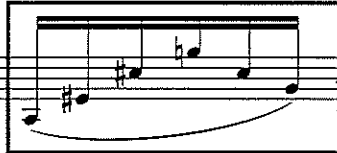
N

0:00

60"

(open strings)

viola



p

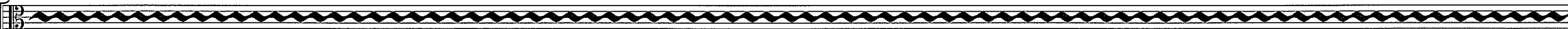
somewhat near the bridge. flautando. not too fast.

1:00

60"

end flautando

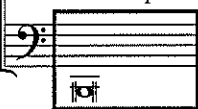
vla



mp

normal position

vcl

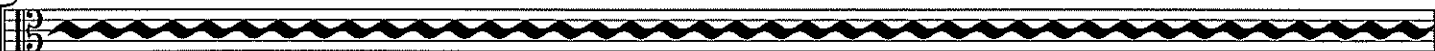


p

2:00

30"

vla



mp

very gradual, subtle decrescendo

(open strings)

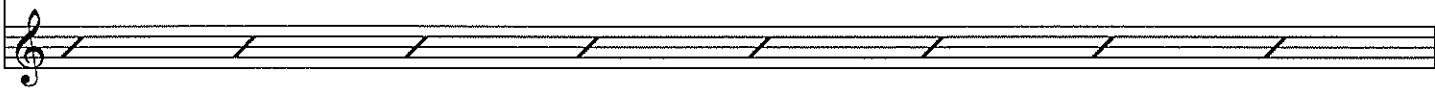
vcl



not too fast.

mp

sh



2:30

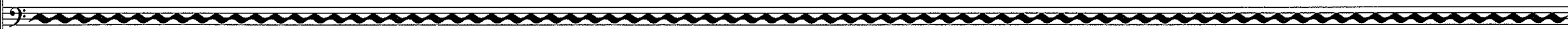
60"

vla



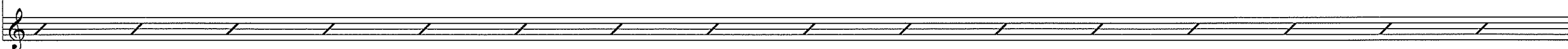
p

vcl



mp

sh



3:30 30"

N

Score for measures 3:30 to 3:30 (30 seconds).

Instrument parts: vln 1, vln 2, vla, vcl, bs, sh.

Key markings and dynamics:

- vln 1: *p* very slow crescendo
- vln 2: *p* very slow crescendo
- vla: *mp* slightly faster
- vcl: slightly faster

4:00 60"

Score for measures 4:00 to 4:00 (60 seconds).

Instrument parts: vln 1, vln 2, vla, vcl, bs, sh.

Key markings and dynamics:

- vln 1: *mp* very slow crescendo, *mf*
- vln 2: *mp* very slow crescendo, *mf*
- vla: *mf* extremely slow crescendo
- vcl: *mf* extremely slow crescendo

44 5:00 60"

N

vln 1

fast

f

vln 2

fast

f

vla

fast

f

vcl

fast

f

bs

big sound, but save it

f

sh

6:00 60"

all

ff

7:00 5' (300")

all

fff

all

all

all

all

12:00 40"

N

Score system 1 (12:00 40"): Includes staves for vln 1, vln 2, vla, vcl, bs, and sh. The first four staves (vln 1, vln 2, vla, vcl) contain a continuous wavy line pattern, indicating a sustained sound or tremolo. The vln 1 and vln 2 staves are marked with a forte (*f*) dynamic. The vla staff is marked with a forte (*f*) dynamic and includes the instruction "gradual diminuendo to nothing" with a dashed line. The vcl and bs staves are marked with a forte (*f*) dynamic. The sh staff contains a series of diagonal slashes, indicating a sustained sound or tremolo.

12:40 40"

Score system 2 (12:40 40"): Includes staves for vln 1, vln 2, vla, vcl, bs, and sh. The first four staves (vln 1, vln 2, vcl, bs) contain a continuous wavy line pattern, indicating a sustained sound or tremolo. The vln 1 and vln 2 staves are marked with a mezzo-forte (*mf*) dynamic and include the instruction "very slow diminuendo" with a dashed line. The vcl staff is marked with a mezzo-forte (*mf*) dynamic and includes the instruction "very slow diminuendo" with a dashed line. The bs staff is marked with a mezzo-forte (*mf*) dynamic. The sh staff contains a series of diagonal slashes, indicating a sustained sound or tremolo.

46

13:20 40"

N

closer to the bridge

vln 1 *mp*

vln 2 *mp*

vla

vcl slower *mp* gradual diminuendo to nothing

bs *mp*

sh

14:00 60"

near the bridge. still fast.

vln 1 *p* gradual diminuendo to nothing

vln 2 *p* near the bridge. still fast. gradual diminuendo to nothing

vla

vcl

bs *p* no diminuendo slight diminuendo

sh

shakuhachi continues alone
2-3 minutes, then cues Z

15:00

all strings: loosen bow hair for Z

Z

- ❖ Z is similar to X and Y, with strings following the pace of the shakuhachi.
- ❖ The section moves through progressively softer sounds: first bowing strings, then wind sounds with the breath, to bowing on the body.
- ❖ The switch between techniques for a single player often elides slightly, resulting in two lines overlapping which should be performed simultaneously.
- ❖ The tracking **line represents volume**. Each sound has its own possible volume range; the loudest breath sound will naturally be softer than a bowed string, so think of the notated volume ranges as distinct from one another.

❖ Bow **hair should be very loose** for this section.

❖ When playing pitches, always play the last pitch given, while following the shakuhachi. Consequently, the rhythmic values notated in the strings are not literal. Redundant pitches sometimes appear for clarity.



❖ In non-pitched sounds, breaks in the tracking line function as rests. Try to only breathe here, but if you can't get volume without more frequent breaths, breathe as needed.

❖ Breath sounds are given with a consonant and a vowel. The **consonant should be sustained throughout**, with the vocal cavity shaped to bring out the vowel.

❖ For bowing on the body, bow in the center of the bout, on the edge.

Z Play freely, leading the strings, with a great deal of Ma.

Handwritten musical notation on a staff, featuring various symbols, notes, and rests. The notation includes a large 'Z' at the beginning, followed by a series of notes and rests, with some notes marked with 'x' and 'y'. The notation is written in a stylized, handwritten style, with some notes and rests enclosed in boxes. The notation is written on a staff with a single line, and the notes are written above the line. The notation is written in a way that suggests a sequence of notes and rests, with some notes marked with 'x' and 'y'.

When strings are ready, trigger O.

2

z No vibrato, flautando, sul tasto, bow hair loose

violin 1

violin 2

viola

cello

double bass

shakuhachi

y

6

vln 1

vln 2

vla

vcl

bs

sh

"Shee..."

(tighten bow hair)

11

vln 1

vln 2

vla

vcl

bs

sh

X

16

vln 1

III

"Shee..."

(tighten bow hair)

vln 2

"Shee..."

(tighten bow hair)

vla

vcl

"Shū..."

bs

sh

21

y

vln 1

vln 2

vla

vcl

bs

sh

II II&III

"Fū..."

"Fū..."

"Shū..."

Bowing on the body

(tighten bow hair)

27

z

vln 1

vln 2

vla

vcl

bs

sh

sul pont. slow —————> fast sul tasto

"Fū..."

"Whō..."

"Whō..."

Bowing on the body

(tighten bow hair)

52

$$Z$$

X

"Whoa..."

33

vln 1

vln 2

vla

vcl

bs

sh

Whoa...

Bowing on the body

Bowing on the body

38

vln 1

vln 2

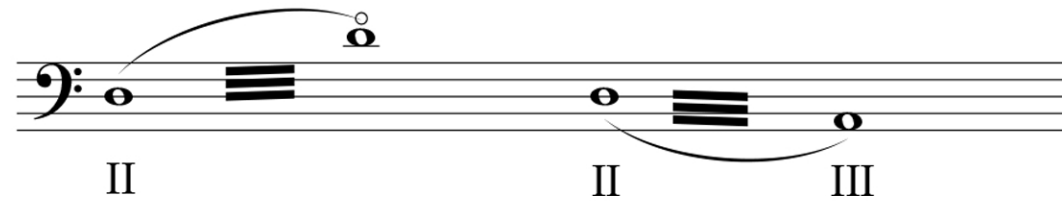
vla

vcl

bs

sh

proceed directly
to O (no rush)



❖ Each bar in this section lasts for 20 seconds.

❖ **Octave tremolos** happen on a **single string** as harmonic tremolos, unless otherwise notated. **Other intervals** are **across two strings**.

❖ Like M, this section employs 5-limit just intonation. All **Bs, Cs, and Fs of any quality are altered** one way or the other. An arrow mark on any accidental is an instruction to adjust that pitch **by a syntonic comma, 20.5 cents**, in the direction the arrow is pointing. Listen carefully to the vertical harmonies, and these intervals should sound quite natural.

❖ A Hauptstimme marking establishes a line as the principle voice until the next such indication.

0

1 bar = 20"

0

violin 1

violin 2

viola

cello

double bass

shakuhachi

mp

stop extension on D and allow string to resonate

mp

mf

III

5

vln 1

vln 2

vla

vcl

bs

sh

mp

mf

mp

II

II

Improvise using only "J"

Score for measures 9-12. Instruments: vln 1, vln 2, vla, vcl, bs, sh.

Measure 9: vln 1 (*mp*), vln 2 (*mp*), vcl (*mf*), bs (*mf*). Sh (silence).

Measure 10: vln 1 (*mf*), vln 2 (*mf*), vcl (silence), bs (silence). Sh (silence).

Measure 11: vln 1 (silence), vln 2 (silence), vcl (silence), bs (silence). Sh (silence).

Measure 12: vln 1 (silence), vln 2 (silence), vcl (silence), bs (silence). Sh (silence).

Score for measures 13-16. Instruments: vln 1, vln 2, vla, vcl, bs, sh.

Measure 13: vln 1 (*mp*), vln 2 (*mp*), vcl (silence), bs (silence). Sh (silence).

Measure 14: vln 1 (*p* to *pp*), vln 2 (silence), vcl (silence), bs (*mp*). Sh (silence).

Measure 15: vln 1 (silence), vln 2 (*mf*), vla (*mf*), vcl (silence), bs (silence). Sh (silence).

Measure 16: vln 1 (silence), vln 2 (*mp*), vla (*mp*), vcl (silence), bs (*mp*). Sh (silence).

Score for measures 56-61, marked with rehearsal mark 18. The score includes staves for Violin 1 (vln 1), Violin 2 (vln 2), Viola (vla), Violoncello (vcl), Bass (bs), and Shofar (sh). The key signature is one sharp (F#). The time signature is 2/4.

Measure 56: vln 1 has a whole rest. vln 2, vln 2, vln 2, and bs enter with a half note G4, marked *f*. vcl has a whole rest. sh has a whole rest.

Measure 57: vln 1 has a whole rest. vln 2, vln 2, vln 2, and bs continue with a half note A4, marked *mp*. vcl has a whole rest. sh has a whole rest.

Measure 58: vln 1 has a whole rest. vln 2, vln 2, vln 2, and bs continue with a half note B4, marked *mf*. vcl has a whole rest. sh has a whole rest.

Measure 59: vln 1 has a whole rest. vln 2, vln 2, vln 2, and bs continue with a half note C5, marked *mp*. vcl has a whole rest. sh has a whole rest.

Measure 60: vln 1 has a whole rest. vln 2, vln 2, vln 2, and bs continue with a half note D5, marked *mp*. vcl has a whole rest. sh has a whole rest.

Measure 61: vln 1 has a whole rest. vln 2, vln 2, vln 2, and bs continue with a half note E5, marked *mp*. vcl has a whole rest. sh has a whole rest.

Score for measures 62-67, marked with rehearsal mark 24. The score includes staves for Violin 1 (vln 1), Violin 2 (vln 2), Viola (vla), Violoncello (vcl), Bass (bs), and Shofar (sh). The key signature is one sharp (F#). The time signature is 2/4.

Measure 62: vln 1 has a whole rest. vln 2, vln 2, vln 2, and bs enter with a half note G4, marked *mf*. vcl has a whole rest. sh has a whole rest.

Measure 63: vln 1 has a whole rest. vln 2, vln 2, vln 2, and bs continue with a half note A4, marked *f*. vcl has a whole rest. sh has a whole rest.

Measure 64: vln 1 has a whole rest. vln 2, vln 2, vln 2, and bs continue with a half note B4, marked *mf*. vcl has a whole rest. sh has a whole rest.

Measure 65: vln 1 has a whole rest. vln 2, vln 2, vln 2, and bs continue with a half note C5, marked *f*. vcl has a whole rest. sh has a whole rest.

Measure 66: vln 1 has a whole rest. vln 2, vln 2, vln 2, and bs continue with a half note D5, marked *mf*. vcl has a whole rest. sh has a whole rest.

Measure 67: vln 1 has a whole rest. vln 2, vln 2, vln 2, and bs continue with a half note E5, marked *mp*. vcl has a whole rest. sh has a whole rest.

Score for measures 30-35. Instruments: vln 1, vln 2, vla, vcl, bs, sh.

Measures 30-35 show a gradual dynamic change from *f* to *mp* for the strings. The woodwinds (vcl, bs) play a rhythmic pattern of eighth notes. The percussion (sh) plays a steady eighth-note pulse.

Score for measures 36-41. Instruments: vln 1, vln 2, vla, vcl, bs, sh.

Measures 36-41 show a dynamic change from *f* to *mp* for the strings. The woodwinds (vcl, bs) play a rhythmic pattern of eighth notes. The percussion (sh) plays a steady eighth-note pulse.

Measures 38-41 show a dynamic change from *f* to *mp* for the strings. The woodwinds (vcl, bs) play a rhythmic pattern of eighth notes. The percussion (sh) plays a steady eighth-note pulse.

58

42

0

vln 1

vln 2

vla

vcl

bs

sh

ff

ff

ff

ff

2

2

2

48

vln 1

vln 2

vla

vcl

bs

sh

ff

ff

ff

f

0

0

2

2

2

54 bar = 20"

vln 1 *f* *mf* *mp* *p*

vln 2 *f* *mf* *mp* *p*

vla

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

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

sh 2 2

slightly closer to the bridge

very close to the bridge

58 shakuhachi improvises on ♮ as desired, then cues C

vln 1

vln 2

vla

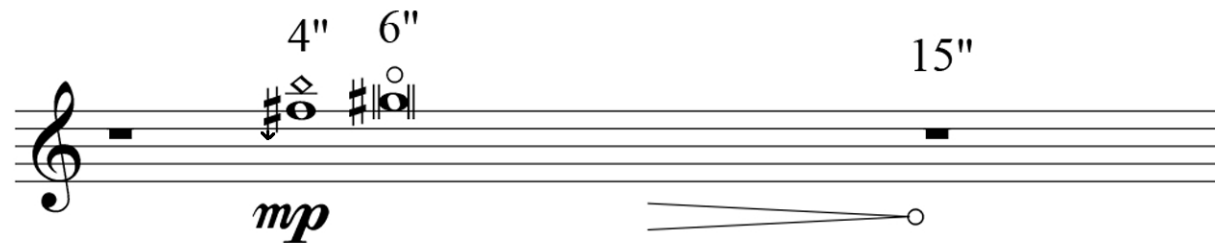
vcl

bs

sh

C

- ❖ Each bar in this section lasts for 20 seconds.
- ❖ The number over each note/rest indicates the exact second in the bar at which that note/rest begins. Each note/rest lasts until the next such indication.
- ❖ Hairpins terminating with a circle mean an even **decrescendo into silence**.
- ❖ This section employs just intonation. All Ebs are raised, and F#s lowered, by a syntonic comma, 20.5 cents.
- ❖ The dynamic gesture in each instrument's first entrance should be repeated in every bar for the entire section: **begin *mp*, sustain until 10", then diminish to silence at 15"**.



- ❖ After measure 21, wait for the given cue from the shakuhachi to perform the final gesture.

C

adapted from Itchokken Koku Reibo

Wait six cycles of 20", then begin.

[illegible]

C

1 bar = 20"

violin 1

violin 2

viola

cello

double bass

8^{va} sempre

1"

15"

mp

3"

15"

0"

15"

mp

15"

15"

15"

4

vln 1

vln 2

vla

vcl

bs

5"

15"

6"

15"

2"

15"

repeat dynamics throughout

1:5

3"

15"

5"

15"

repeat dynamics throughout

(shakuhachi enters)

II:7
mp

64 **13**

vln 1

vln 2

vla

vcl

bs

mp

p

22

vln 1

vln 2

vla

vcl

bs

(shakuhachi)

pizz let ring

ff

pizz let ring

ff

pizz let ring

ff

pizz let ring

ff

End