

Charlie Sdraulig

scan

amplified string quartet version

2016-17

For the Spektral and JACK quartets

Note

Scanning (mostly scratching, one bowing) back and forth.

The violist and the rest of the quartet are put in opposition to one another. Over time, each group assimilates and absorbs characteristics of the other, bearing the traces of a mutually influencing process. Or, perhaps everyone was scanning through the same thing the whole time, albeit with different appendages.

Acknowledgements

I would like to thank Andrew Greenwald and Jessie Marino for their invaluable comments and suggestions regarding the performance materials.

The octet version was first performed by the JACK and Spektral quartets during their residency at Stanford University on April 3, 2016. The amplified quartet version was subsequently commissioned and premiered by the Spektral quartet at the Constellation in Chicago on May 12, 2017. This quartet version was then revised for a performance by the JACK quartet at Stanford University on January 19, 2018.

General performance directions

Arrange yourselves in a conventional **horseshoe configuration** on the stage (left to right: vln 1, vln 2, vlc, vla); however, the **violist** should be somewhat distanced and **removed** from the rest of the quartet to emphasize their distinct identity compared to the others.

For **amplification**, use **cardioid condenser microphones**—sounds occurring across the entire length of the strings must be captured.

Use some light compression and EQing on the **mixing board** to boost the signal, as well as minimize noise and the potential for feedback.

Send to at least **two speakers** (more may be used for extra reinforcement of the stereo image).

At least **one other person will need to ride the levels on the mixing board (and lighting)**—live diffusion and management of these elements is necessary (see **amplification and lighting** below).

Only the viola player uses a bow in this piece; all other players' sounds are produced with fingertips and nails.

Ensure that music stands are arranged in such a way that obscures the least amount of your instrument and body as possible. (The performance materials should fit on one standard music stand per player.) Ideally, memorise the piece.

There is no score. Every player performs from the same (mirrored tablature) part, but with a different set of instructions for scanning/navigating through the notated material. These **parts** are intended to be printed on a larger format (i.e. **tabloid or A3**).

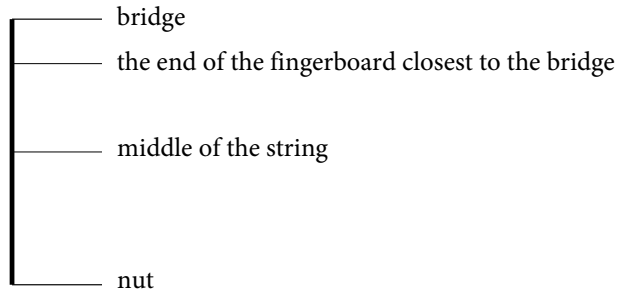
When performing, **try to keep your voluntary physical movement to a minimum.** Try to only perform the actions that are necessary for the piece's realisation, in a **clinical** fashion.

When appropriate, **attend to the slightest micro-variations in the sounds and movements of the other performers.** Equally, attempt to make variations within your own sounds and movements as highly differentiated and as subtle as possible. Cultivate a hyper-sensitivity to detail.

Scordatura

Lower the pitch of all of the strings you play by an uneven amount—lower string tensions will aid you in the execution of certain techniques. However, do not go more than a major third or so lower than a given string’s conventional tuning. It is not necessary or desirable to consciously match the tunings of any of the other performer’s instruments. The sole exception to the above: **the viola player should tune down their string IV by at least a major sixth, if not more.**

Tablature



Finger pressure, fingering and hand positions

Finger pressure on the strings is indicated by the relative lightness/darkness of hand drawn lines.

The **right hand** is notated in black. The **left hand** is notated in red.

Using the cue letters in the notated material as a reference, smoothly transition between the following states:



1. Both hands at **C**: hold the **finger** (or **bow** for the right hand of the viola) between 1 and 2 mm above the string. Allow the natural nervous twitch of your muscles to cause intermittent, accidental contact with the string, with perhaps only just a risk of producing an audible result. When contact does occur it should be at approximately a harmonic pressure. (The quality of physical contact should be similar to holding your thumb and index finger as close together as possible without intentionally touching.)
2. The right hand at **E**: the equivalent of a normal pressure.
3. The left hand at **F**: Overpressure.



The hand drawn line for each hand indicates the pressure for all techniques at a given point on all strings.




Always use only one finger per string; use the same finger for a given string throughout the piece (e.g. 1st finger (index finger on both hands) always plays on string IV etc.).



When playing multiple strings with multiple fingers in each hand, try to keep a given hand's fingers as close to the same point on every string as possible, without violently contorting or causing yourself undue discomfort! If necessary, try to keep whatever angle you may have to adopt across the fingerboard as consistent as possible.


Techniques


 and  : scrape the side of the string (represented by the black dot) with the back of your fingernail (these pictures represent the tip of your finger and your fingernail); your finger will move up and down acting like a proxy bow; apply pressure sideways.



 +  : in one quick motion, allow the string to fall down off the back of your fingernail and then immediately try to stop the string from vibrating by dampening it with the flesh of your fingertip—a choked quasi-pizzicato sound should result (**q.-p.s**).

,  and  : scrape along the top of the string with the tip of your fingernail; your finger may move, pivoting from side to side whilst acting like a proxy bow; apply pressure downwards.

 +  : scrape as quickly as possible between the indicated positions in a jerk-like movement—a choked quasi-pizzicato sound should result (**q.-p.s**).

 : scrape along the top of the string with part of your fingernail and part of the flesh of your fingertip.

 : from the side, wedge your finger underneath the string so that it rests on the back of your fingernail; apply pressure upwards.




 +  : in one quick motion, allow the string to fall down off the back of your fingernail and then immediately try to stop the string from vibrating by dampening it with part of your fingernail and part of the flesh of your fingertip (**q.-p.s**).

Execute each technique with the pressure notated at the central point of the technique's symbol.



(Arrows between techniques indicate smooth transitions.)

Section instructions and cues (mostly for the vln 1, vln 2 and vlc)

The instructions for each of the sixteen sections in this piece are indicated in the following form:

⑫ ; after vln 2 reaches **F**, *rh & lh*; **III**; *medium*; **E**  **H**; vln 2 leads, *slow* **CUE**, **NEST** **A**  **I** [*w/vln 1 & vln 2*].

The section number is followed by:

- A **pause**: freeze and wait
- An **event** to listen/watch out for that triggers the following actions
- Which **hand(s)** play during that section
- Which **string(s)** to play
- The **speed** to adopt:
 - *slow*, at about the speed it would take to play from **A**  **L** in ca. 30 to 40 seconds.
 - *medium*, at about the speed it would take to play from **A**  **L** in ca. 10 to 15 seconds.
 - Very occasionally other extreme speed markings are given, which should noticeably differ from the above.
 - Please note that all the given timings etc. are intended as a guide and not as strict rules—a degree of flexibility is intended. However, try to maintain a consistent interpretation of the above terms throughout the piece.
- The **points** to play/scan between (N.B. the blue line extending vertically across the tablature is the start/end point for a given letter): the circular arrow in the example above instructs you to scan back and forth between the given points until the end of the section, playing the pressures and techniques notated. If the arrow between two letter points goes in only one direction, scan between those two points once in that one direction.
- Who **cues** the end of the section: in this example an event is given to listen/watch out for, then a speed to adopt for the cue: generally *deliberate* (ca. 8 seconds total) or *moderate* (ca. 4 seconds total). If **CUE** is indicated, then you will cue the end of the section. Cue the end of a section by quickly and smoothly executing the following actions simultaneously:
 - Move your right hand fingers from the bridge to the middle of the string and back to the bridge; your fingers should hover above the strings, not making any sound.
 - Move your left hand fingers from the nut to the middle of the string and back to the bridge; your fingers should hover above the strings, not making any sound.
 - N.B. Do not intentionally pause at any point in a cue, smoothly transition between all movements *attacca*.
 - However, if **NEST** is indicated (as in this example), *within* the complete overall cuing gesture described above, casually play/trace the notated techniques between the given boundaries, on both the way towards *and* back from middle of the string—a glossed, blurry version of the notated pressures and techniques on the tablature should result, if you will. It is more important to maintain a consistent speed here, rather than to play every notated technique at all costs. This nesting occurs later in the piece; the idea is that the cues are shown to be related to the fussier scanning/playing that happens within sections.
 - Throughout each cue, the vln 1, vln 2 and vlc players should **look directly** at the hands of the person performing cue (or one of them if multiple people are cueing) and adopt a **stiffer, upright** posture—a call to attention of sorts.

- The instruction [*w/vln 1 & vln 2*] indicates that you are performing this action with these players at the same time (often in unison).
- When one section ends, immediately move to the starting point of the next section and all of the new indicated variable states.

Section instructions and cues (*vla*)

Contrasting with the section instructions for the other instruments, the boxed letters primarily indicate where to bow along the string (at the pressure notated; N.B. the blue line extending vertically across the tablature is the start/end point for a given letter). The duration for *slow* full bows is the same as the speed for the *slow* scanning techniques (i.e. ca. 30 seconds). At this speed, which should be barely sufficient to produce a continuous sound at a normal (*mp*) bow pressure, your sound should be in constant danger of almost breaking up.

Only play up bows, throughout.

D → (**A**)

- Vertical movement is indicated as above. This example gives you a starting point, and a direction along the string to play and move towards (in brackets, which indicate that you may not reach this goal due to other events).

when you hear **q.-p.s** some arbitrary jumps/some matching jumps, then *slow* → (**A**)

- **q.-p.s** indicates quasi-pizzicato sounds (see *Techniques*)
- *arbitrary jumps*: jump to an arbitrary point along the string and adopt the indicated pressures and techniques (if applicable), vary your bow speed *ad lib.* Aim for some degree of variety and contrast with each jump (in terms of pressures, bow speed and techniques etc.) to emphasize and communicate an ‘arbitrary’ quality to your behaviour.
- *matching jumps*: jump to the point along the string that most closely matches the loudness of the quasi-pizzicato sound you just heard, and adjust your bow speed as necessary to match your loudness to that of the quasi-pizzicato sound as closely as possible.
- *some/mostly/few* etc.: the general proportion of arbitrary vs. matching jumps to aim for in a given section. (Roughly, some = ca. 50%; mostly = ca. 75%; few = ca. 25%)
- then move towards the bracketed goal at the indicated speed, adopting the notated pressures and techniques, until the next quasi-pizzicato sound.
- *bow freezes*: either stop any horizontal bow movement, but either keep moving vertically and changing your bow pressure; or lift your bow off the string entirely—increasingly opt for the latter execution as you get closer to the end of the piece.

From Section 10 onwards, be sure to perform the scratching and rubbing notated in the left hand to signpost your increasing assimilation into the group made up of the rest of the quartet.

Following the viola (vln 2 and vlc)

In later sections of the piece, the following instructions appear:

- *look at the vla and follow a similar path*
 - At a slight delay, move between, or jump to, the points along the string that the violist is playing—something like a blurry, imprecise imitation in canon.
 - Play the pressures and techniques in your part associated with those points along the string
- *look at the vla and follow the same path*
 - As exactly and as quickly as possible, move between, or jump to, the points along the string that the violist is playing.
 - Play the pressures and techniques in your part associated with those points along the string

Amplification and lighting instructions

The amplification and lighting is intended to reinforce: (1) the initially distinct identity of the violist and (2) the violist's gradual assimilation into the group comprising the rest of the quartet.

The vln 1, vln 2 and vlc should be **maximally amplified throughout** (while safely avoiding the possibility of feedback and maintaining an acceptable signal-to-noise ratio).

The person running the mixing board will need to ride the levels of the above performers, but their primary task is to **alter the level and separation** (in the stereo field) of the **violist**, and hence they should follow the violist's part when executing the following instructions:

- ① to ③ no amplification.
- ④ a little amplification (almost inaudible); viola distinctly separated in the stereo field from the rest of the quartet.
- ⑤ (no viola playing).
- ⑥ gradually a little more amplification and less separation.
- ⑦ (no viola playing).
- ⑧ with each **q.-p.s** gradually increase the level of amplification and decrease separation.
- ⑨ achieve maximal amplification of the viola by the end of this section (= level of other members of the quartet), as well as its conventional placement in the stereo field of the quartet; thereafter, no more change in the level and separation of the viola.

Finally, **occasionally dip** the levels of the vln 2 and vlc parts during section 15 *ad lib.*, before the final viola solo.

Similarly, if it is possible to dynamically control the **lighting** of the violist, light them slightly above or below the level of the rest of the quartet at first (a slightly different colour temperature may also be used) and then gradually bring their lighting to the same level (and colour temperature) as the rest of the quartet by section 9. Compared to the impact of the amplification, the effect and change of the lighting should be more gradual and much subtler overall. If it is not possible to dynamically control the lighting of the violist, they may be lighted with a slightly different source (e.g. their own lamp, as opposed to the overhead house lighting) in contrast to the rest of the quartet.

If you have any questions, please feel free to email me at c-sdraulig@hotmail.com

vln 1

- ① *deliberate CUE*; ; vln 2 cues end.
- ② ; vlc cues end.
- ③ ; vln 2 cues end.
- ④ ; after vla stops, *deliberate CUE*.
- ⑤ *rh*; IV; *slow*; **A** → **C** → **A** [*w/vlc*]; vlc cues end.
- ⑥ ; after 2/3 vla bow, *rh & lh*; IV; *slow*; **A** ↻ **C** [*w/vln 2*]; after vla stops, *very deliberate CUE* [*w/vln 2*].
- ⑦ *rh & lh*; IV; *slow*; **A** ↻ **D** [*first time* → *w/vln 2 & vlc*]; vlc cues end.
- ⑧ ; after 1/2 vla bow, *rh & lh*; IV; *slow*; **C** → **G** → **D**; vlc cues end.

The image displays a musical score for Violin 1, divided into right hand (rh) and left hand (lh) parts. The score is organized into measures, with cues labeled A through L. The right hand part includes staves for I, III, and IV, with musical notation and bowing directions. The left hand part includes staves for I, III, and IV, with musical notation and bowing directions. A large, shaded area in the center of the score represents the volume of the instrument, with a red line indicating the volume of the left hand and a black line indicating the volume of the right hand. The score is annotated with various cues and dynamics, including 'deliberate CUE', 'moderate CUE', 'deliberate CUE', and 'very deliberate CUE'. The cues are labeled with letters A through L, and some are enclosed in boxes. The score is also annotated with 'ord.' (order) and 'w/vlc' (with volume cue).

- ⑨ *rh & lh*; III; *medium*; **D** ↻ **F** [*first time* → *w/vlc*]; vln 2 cues end.
- ⑩ ; after vln 2 stops, *moderate CUE*, *NEST rh & lh*, III, **B** ↔ **F** [*w/vlc*].
- ⑪ *rh & lh*; III; *medium*; **E** ↻ **J**; vln 2 cues end.
- ⑫ ; vln 2 leads, *deliberate CUE*, *NEST rh & lh*, I, **C** ↔ **F** [*w/vln 2 & vlc*].
- ⑬ *rh & lh*; I; *slow*; **D** → **K** → **F**; *moderate CUE*, *NEST B* ↔ **D**.
- ⑭ ; vln 2 & vlc cue end.
- ⑮ ; after vlc reaches **H** for the first time, *rh & lh*; I; *slow*; **F** → **L** → **A**; *deliberate CUE*.
- ⑯ [*look at vla*] ; vla cues end of piece.

vln 2

- ① vln 1 cues start; ; after vla stops, *deliberate* CUE.
- ② *rh & lh*; IV; *slow*; **A** → **D** → **A**; vlc cues end.
- ③ *rh & lh*; IV; *slow*; **A** → **B** → **A** [*w/vlc*]; *moderate* CUE.
- ④ ; vln 1 cues end.
- ⑤ ; vlc cues end.
- ⑥ ; after 2/3 vla bow, *rh & lh*; IV; *slow*; **A** ↔ **C** [*w/vln 1*]; after vla stops, *very deliberate* CUE [*w/vln 1*].
- ⑦ *rh & lh*; IV; *slow*; **A** ↔ **C** [*first time* → *w/vln 1 & vlc*]; vlc cues end.
- ⑧ ; vlc cues end.

The image displays a musical score for Violin 2, divided into right hand (rh) and left hand (lh) parts. The score is written on two systems: III and IV. The right hand part (rh) is written on a single staff, while the left hand part (lh) is written on two staves (III and IV). The score is marked with various cues (A through L) and dynamic markings (e.g., *ord.*). The cues are arranged in a sequence that corresponds to the numbered list above. The left hand part includes cues A through L, with some cues (A, B, C, D, E, F, G, H, I, J, K, L) appearing on both the III and IV staves. The right hand part includes cues A through L, with some cues (A, B, C, D, E, F, G, H, I, J, K, L) appearing on the III staff. The score is marked with various dynamic markings, including *ord.* (order) and *deliberate* (deliberate). The cues are arranged in a sequence that corresponds to the numbered list above. The left hand part includes cues A through L, with some cues (A, B, C, D, E, F, G, H, I, J, K, L) appearing on both the III and IV staves. The right hand part includes cues A through L, with some cues (A, B, C, D, E, F, G, H, I, J, K, L) appearing on the III staff.

- ⑨ ; after vlc stops, *deliberate* CUE, NEST *rh & lh*, IV, **E** ↔ **F**.
- ⑩ *rh & lh*; IV; *slow*; **B** → **I** → **D**; vln 1 & vlc cue end.
- ⑪ *rh & lh*; IV; *slow*; **K** → **F**; *quick* CUE.
- ⑫ *rh & lh*; IV; *medium*; **L** → **D** → **E**; *deliberate* CUE, NEST **D** ↔ **L** [*w/vln 1 & vlc*].
- ⑬ *rh & lh*; IV; *medium*; **L** → **F**; then look at vla and follow a similar path; vln 1 cues end.
- ⑭ ; vlc leads, *deliberate* CUE [*w/vlc*].
- ⑮ ; after vlc reaches **J** for the first time, *rh & lh*; IV & III; look at vla and follow the same path; vln 1 cues end [*but keep looking at vla*].
- ⑯ [*look at vla*] ; vla cues end of piece.

vla

① after end of vln 1 cue; *rh*; IV; one slow full up bow; **D**; vln 2 cues end.

② $\hat{=}$; vlc cues end.

③ $\hat{=}$; vln 2 cues end.

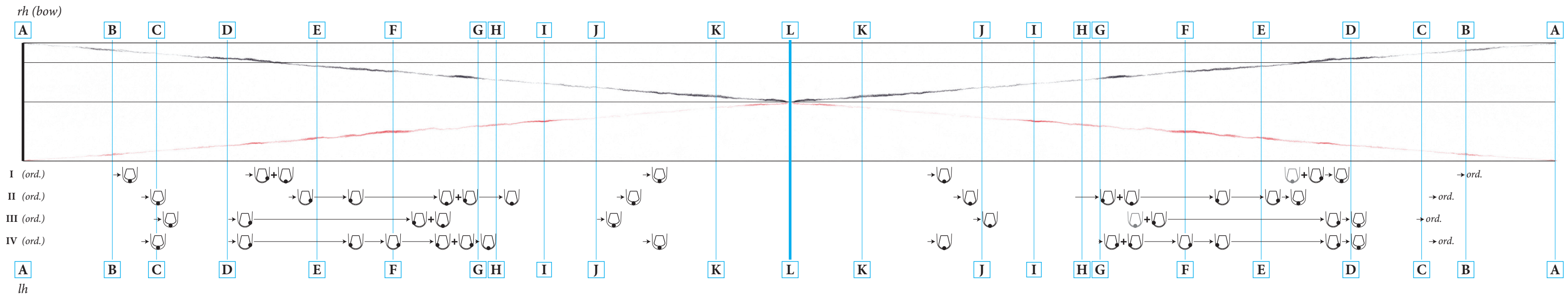
④ *rh*; IV; one slow full up bow; **B**; vln 1 cues end.

⑤ $\hat{=}$; vlc cues end.

⑥ *rh*; IV; one very slow full up bow; **C**; then, after vln 1 & vln 2 enter, \rightarrow **A**; vln 1 cues end.

⑦ $\hat{=}$; vlc cues end.

⑧ *rh*; IV; slow full up bow at first, then retake as necessary; **D** \rightarrow (**A**); when you hear **q.-p.s** mostly arbitrary jumps/few matching jumps, then slow \rightarrow (**A**); vlc cues end.



⑨ $\hat{=}$; after vlc reaches **F** for the first time, *rh*; IV; slow full up bow (then retake if necessary); **F** \rightarrow (**A**); when you hear **q.-p.s** mostly arbitrary jumps/few matching jumps, then slow \rightarrow (**A**); vln 2 cues end.

⑩ *rh* & *lh*; IV; slow full up bow at first, then retake as necessary; **D** \rightarrow (**A**); when you hear **q.-p.s** ever more matching jumps/fewer arbitrary jumps, then slow \rightarrow (**A**); vlc cues end, keep playing until the end of the vln 1 & vlc cue.

⑪ $\hat{=}$; vln 2 cues end.

⑫ *rh* & *lh*; IV; slow full up bow at first, then retake as necessary; **I** \rightarrow (**A**); when you hear **q.-p.s** mostly matching jumps/few arbitrary jumps, then slow \rightarrow (**A**); continue playing through cue.

⑬ *rh*; IV & *lh*; IV & III; as before, but when you hear **q.-p.s** mostly matching jumps/few bow freezes near the end of this section, then slow \rightarrow (**A**); continue playing through cue.

⑭ *rh*; IV & *lh*; IV, III & II; **H** \rightarrow (**A**); as before, but when you hear **q.-p.s** some matching jumps/some bow freezes, then slow \rightarrow (**A**); continue playing through cue.

⑮ *rh*; IV & *lh*; IV, III & II; as before, but when you hear **q.-p.s** ever more bow freezes/fewer matching jumps, then slow \rightarrow (**A**); then, after vln 1 reaches **H** for the first time, $\hat{=}$; then after the vln 1 reaches **E**, resume as before, but lh only (keep your bow well above the strings, immobile, until the end of the piece); keep playing until the end of the vln 1 cue.

⑯ *lh*; IV, III, II & I; slow; **L** \rightarrow **A** \rightarrow **L**; very deliberate CUE (no nesting, but in direction: **L** \rightarrow **A** \rightarrow **L**); end of piece.

vlc

- ① vln 1 cues start; ; vln 2 cues end.
- ② ; after vln 2 stops, moderate CUE.
- ③ rh; I; slow; **A** → **B** → **A** [w/vln 2]; vln 2 cues end.
- ④ ; vln 1 cues end.
- ⑤ rh & lh; I; slow; **A** → **C** → **A** [w/vln 1]; moderate CUE.
- ⑥ ; vln 1 & vln 2 cue end.
- ⑦ rh; I; slow; **A** → **E** → **A** [first time → w/vln 1 & vln 2]; moderate CUE.
- ⑧ ; after vln 1 stops, deliberate CUE, NEST rh & lh, I, **B** ↔ **D**.

- ⑨ rh & lh; I; medium; **D** → **G** → **F** [first time → w/vln 1]; vln 2 cues end.
- ⑩ ; after vln 2 stops, moderate CUE, NEST rh & lh, II, **C** ↔ **E** [w/vln 1].
- ⑪ rh & lh; II; medium; **F** ↔ **K**; vln 2 cues end.
- ⑫ ; after vln 2 reaches **F**, rh & lh; III; medium; **E** ↔ **H**; vln 2 leads, deliberate CUE, NEST **A** ↔ **I** [w/vln 1 & vln 2].
- ⑬ rh & lh; III; medium; **C** ↔ **K**; vln 1 cues end.
- ⑭ ; after 1/2 vla bow, rh & lh; IV; medium; **L** → **D**; deliberate CUE, NEST **C** ↔ **E** [w/vln 2].
- ⑮ rh & lh; IV; medium; **L** → **F**; then look at vla and follow a similar path; vln 1 cues end [but keep looking at vla].
- ⑯ [look at vla] ; vla cues end of piece.