

SPELEOTHEMES

For Orchestra and Sounding Stones

Instrumentation

2 Flutes
2 Oboe
2 Clarinets
1 Bass Clarinet
2 Bassoons
1 Contra bassoon
2 Horns in F
2 Trumpets
2 Trombones
1 Tuba

1 Timpani

Percussion (10 players)

10 Sounding Stones (4 on stage, 5 bows, 3 jazz brush sticks)

1 Suspended Cymbal (large)
1 Gong with triangle stick
1 Tibetan bells C and G

Harp
Piano
Strings

16 Violins I
14 Violins II
10 Violas
8 Cellos
8 Double Basses

Score in C

PERFORMANCE NOTES

Notes for Conductor

↓ ← → ↑ arrows indicate conducting cues shaped as in 4/4 beat

l.h. ↓↓ r.h. cue with both hands


General Notation


————→ change gradually from one sound or one way of playing to another

◦———— crescendo dal niente

————◦ diminuendo al niente

l.v. *laissez vibrer*

 quarter tone up

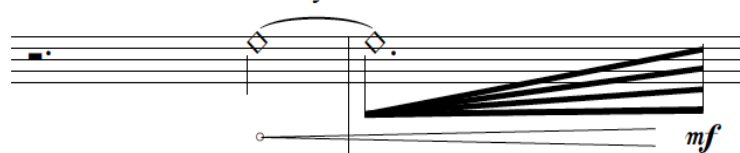
 quarter tone up

All glissandos should be played throughout the duration of the note value, as slow as possible, emulating the detachment of a drop from the body of the speleothem.

Woodwinds

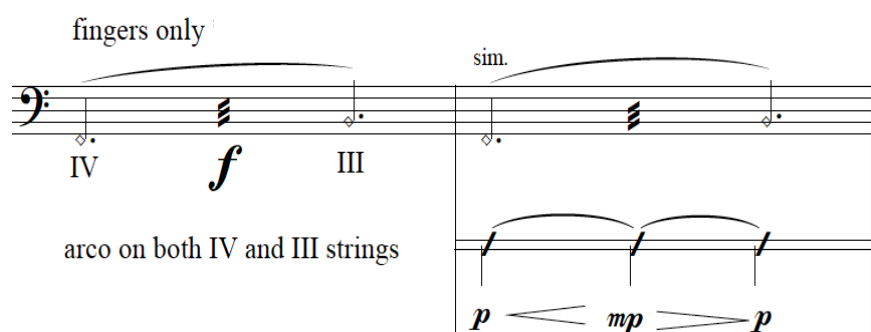
- Blow into the instrument tonelessly while producing the sound 'tk-tk' with the tongue

blow into the instrument tonelessly tk-tk-tk-tk



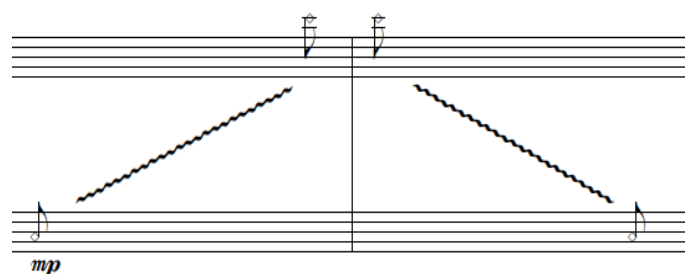
Strings

- Tap the strings with some force releasing the fingers for each articulation as fast as possible, then draw the bow on both strings



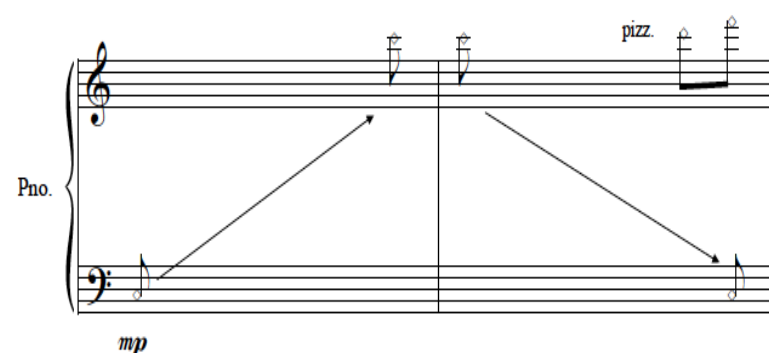
Harp

- Circular glissando, play several circular glissandi, gradually ascending or descending to the destination pitches



Piano

- Tapping upwards and downwards on strings with the left hand, pizzicato with right hand



Sounding Stones – technical and practical indications

In order to obtain the best result from the Sounding Stones, players are recommended to warm their hands by mutual friction before playing, and to wet their hands alternatively whilst playing using a wet warm towel. When possible it is also recommended to spread rosin dust on the palm of the hands, as it will increase the friction of the hands against the surface of the Stones, enhancing their resonance.

It should always be taken into consideration that usually the Stones do not resonate immediately, their sound built up after several frictions, when Stones warm up.

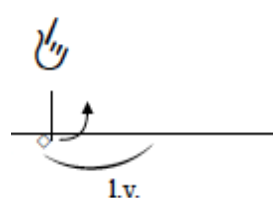
The Sounding Stones respond promptly to the bow. A generous use of rosin on the bow is recommended, as used by string players.

Sounding Stone notation of the techniques used in the score:

Fingers

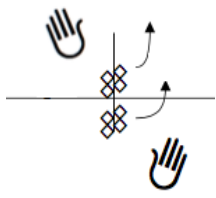
- Release pressure on single upstroke:

Press hard with one fingertip on one stele, then release the pressure suddenly to produce a tone, let vibrate.



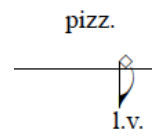
- Release pressure – multiple fingers:

Press hard all fingers (thumbs excluded) on the steles, then release the pressure suddenly to produce a tone cluster and melodies.



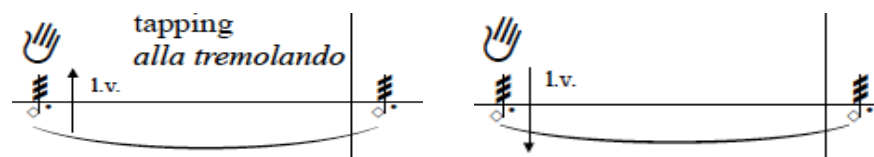
- Pizzicato:

Play pizzicato with one or more fingers on one or more steles, let vibrate.



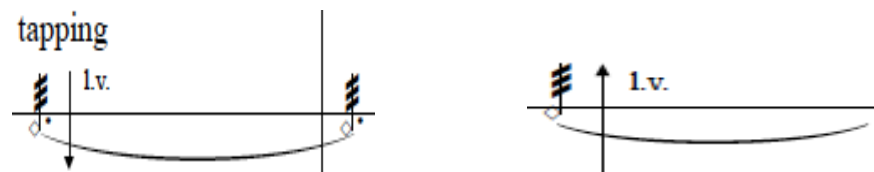
- Tapping *alla tremolando*:

Tap the steles with the fingertips whilst slightly rotating the hands to produce a *tremolando* effect, moving across the Stone upwards or downwards, let vibrate.



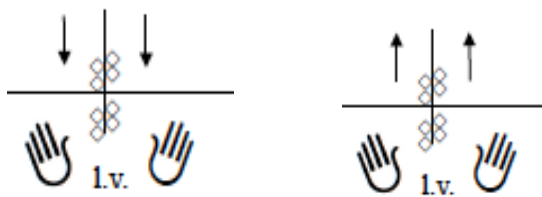
- Tapping:

Use the fingertips similar to keyboard playing, articulate with rapid movements, moving across the Stone upwards or downwards.



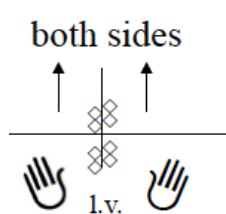
- Fingernails upwards and downwards:

With hands facing backwards draw fingernails (four fingers, thumbs excluded) across the top surface of the Stone using nails for articulation upwards and downwards, let vibrate.



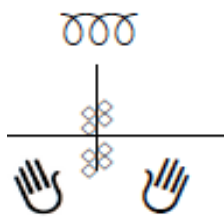
- Fingernails on both sides of limestone Harp:

Draw the fingernails across both sides of the Stone, moving across it with forward horizontal articulations, with very light pressure, let vibrate.



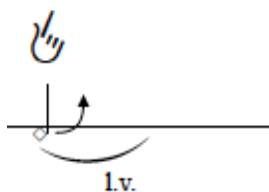
- Fingernails in circle motion on both sides of limestone harp:

Draw the fingernails across both sides of the Stone, in a circular motion, with very light pressure.



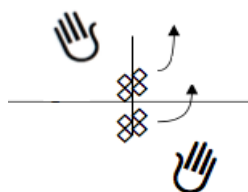
- Release pressure on single upstroke:

Press hard with one fingertip on one stele, then release the pressure suddenly to produce a tone, let vibrate.



- Release pressure – multiple fingers:

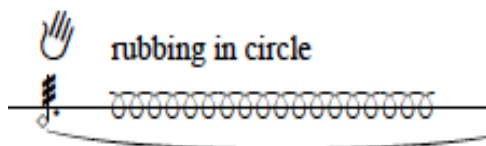
Press hard all fingers (thumbs excluded) on the steles, then release the pressure suddenly to produce a tone cluster and melodies.



Hands

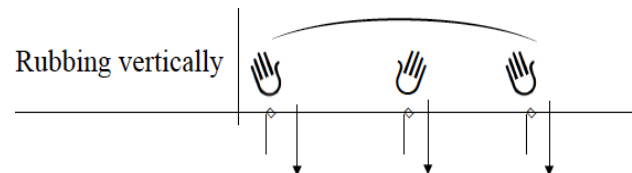
- Rubbing with a circular motion:

Put one hand flat on the top surface of the stone and move it across in a circular motion, with very light pressure.



- Rubbing vertically:

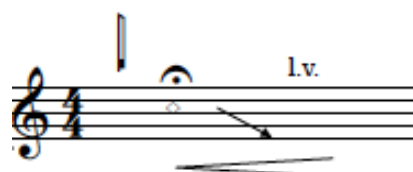
Put one or both hands flat on the top surface of the Stone and move vertically from the top to the bottom with very light/medium pressure.



Bow

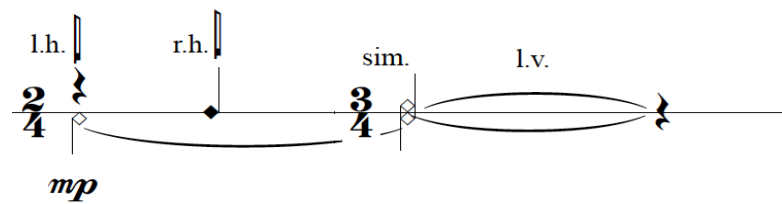
- Bowing on the edge:

Draw the bow across one stele on the top surface of the stone



- Double Bowing:

Hold two bows and draw both on the edge of the Stone, on different steles.




The first note should be played in the bottom stele of an external right or left row, to be considered as an initial reference-point.

A one-line represent graphically a dividing line that separates the first from the following notes, which should be played progressively upwards, regardless of the pitch.

Percussion

- Jazz brush, open or closed:

Brushing on the top surface of the Stone from the top to the bottom, single articulation.

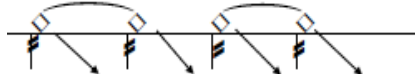
 brush the top surface of the Stone diagonally



- Jazz brush sticks, open or closed:


Brushing on the top surface of the Stone diagonally, with rapid right/left articulation *alla tremolando*.

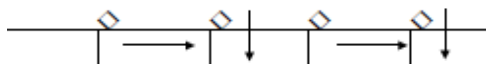
brush the top surface of the Stone diagonally
alla tremolando



- Jazz brush sticks, open or closed:

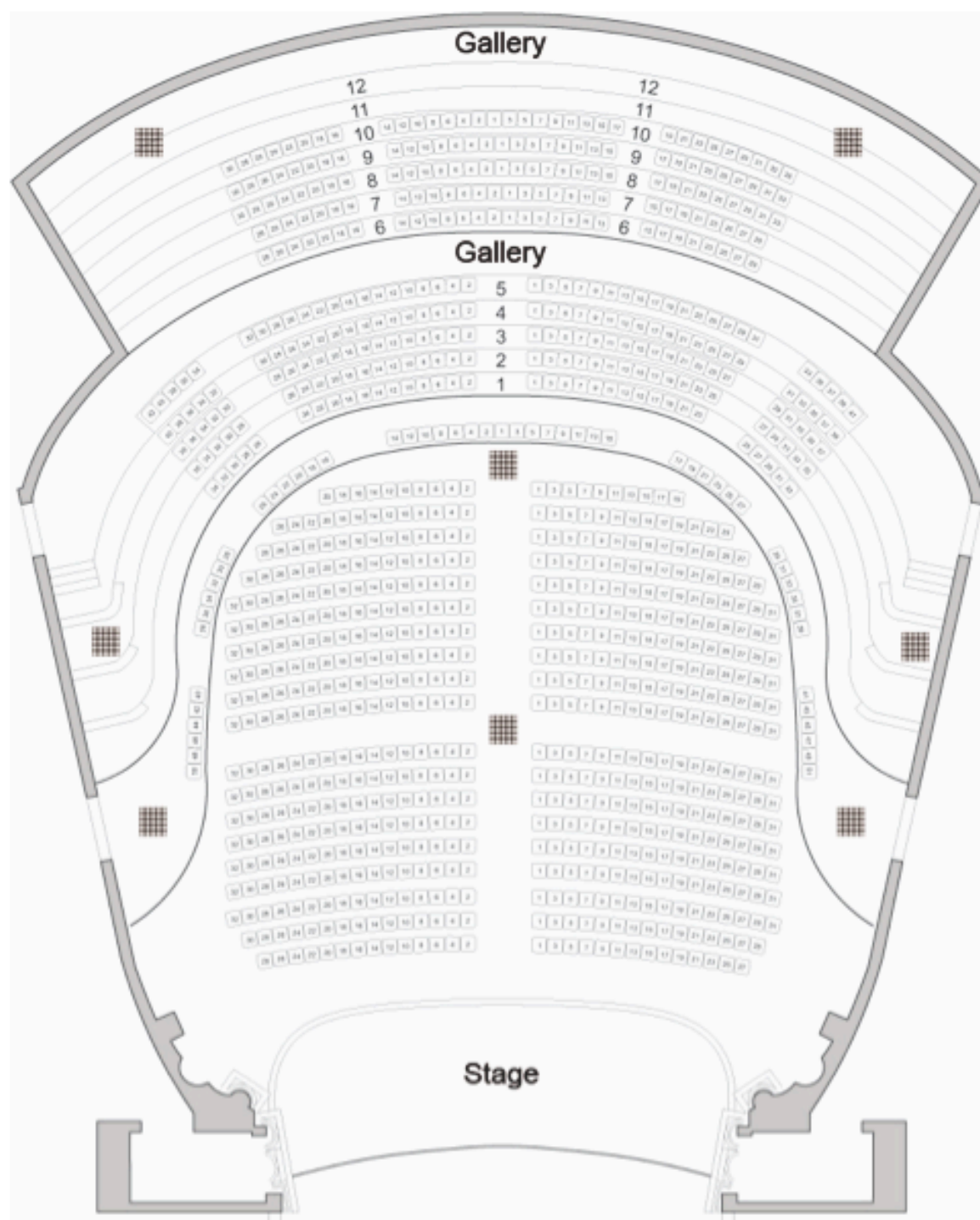
Brushing on both sides of the Harp, alternating articulations with two brushes.

 brush both sides of the Stone
horizontally and vertically



Staging

As soon as visitors enter an active cave system, they immediately realise that echoes of dripping water surround them, yet it is hard to determine precisely the source of the sound. To re-create a similar sound spatialisation, 'Before' requires additional Stones beyond those placed on stage, from six upwards. Stones should be placed hexagonally around/amongst the audience: on the left side; on the right; at the back and one in the middle of the hall. The conductor will give initial cues following the order provided in the score: left, back, right, middle, recalling the spiral shape of the stalactites/stalagmites. This sound spatialisation aims to create both a centripetal and centrifugal sound flux, towards the centre and vice-versa, to surround the audience gradually. If the venue were set on different levels, and more Sounding Stones were available, they should be placed in equal numbers to the sides of the gallery as ideally indicated below.



The players of the Sounding Stones on stage and in the hall will play a given number of times, gradually fading out, leaving the central one playing alone till fading out. If due to its shape it is not possible to place a stone in the middle of the hall, the piece will end when stones placed around the audience fade out.

The Sounding Stones should have a sufficient volume to cover the space of a theatre. If during rehearsals the conductor should realise that there would not be a good enough sound perception, stones should be amplified according to the venue's shape and acoustics, preferably with both contact (i.e. AKG C 411 and/or Schertler BASIK SET or similar) and overhead microphones. Amplification should be aimed at recreating the spiral effect provided in the score as much as possible.

With the purpose of recreating a chamber-like analogous environment, the fading out of the strings should be accompanied by the fading out of the lights, to reach an almost complete visual sensory deprivation. This visual condition should allow listeners to concentrate on the sound texture around them. A direct dimmed light on the conductor allows the Sounding Stones players to follow the final cues that bring the piece to its end. Main lights should be turned on after the last Stone fades out, on the conductor's cue, indicating the very end of the piece and symbolising the end of the journey inside the listeners' unconscious memory.

Sounding Stones placed in the hall should remain covered before the whole piece begins and remain unnoticed for the first three movements. They should be uncovered and played on the conductor's cue when the lights fade out.

'Don't be fooled by symmetry.'

(Pinuccio Sciola, 14 September 2014)

This work is dedicated to the memory of Pinuccio Sciola.