

Project Report – 2 marimbas and 2 vibraphones

General information

Session recording of ensemble consisting of 2 marimbas and 2 vibraphones in one of the university recording spaces. The program of the recording included only one piece:

- Steve Reich - Mallet Quartet

Ensemble consists of following musicians:

- Stefan K.
- Austin L.
- Katelyn K.
- Christian S.

Time schedule

Me and leader of the ensemble met several times to discuss the recording in September. She gave me a reference track of the piece so I could listen and develop an idea of sound that they are looking for.

October 20th 2013: Build up in the morning and recording starting at 3pm until 9pm

Recording personnel

I was responsible for the whole process: planning, recording, producing, editing and mixing. Set up assistance: Nimeet C.

Microphone list

Channel	Name	Microphone
1	A	DPA 4006
2	B	DPA 4006
3	M	Schoeps MK4
4	S	Sennheiser MKH30
5	Marimba L	DPA 4011
6	Vibraphone L	DPA 4011
7	Vibraphone R	DPA 4011
8	Marimba R	DPA 4011

Equipment

DAW: Recorded in ProTools, edited and mixed in Pyramix

Recorded at 96 kHz, 24 bit

Mic preamps: API Vision console preamps

AD/DA converters during recording: SSL Alpha Link

Sample rate conversion from 96 kHz to 44.1 kHz, 24 bit: Saracon

Monitoring during recording: B&W 802 speakers and AKG K550 headphones

Mixed using B&W 802 speakers

Recording concept

This was quite unusual setup, so I had to think much in advance how to approach it. I asked one of the musicians to give me recording of this piece if possible, to have any reference. She also told me that sound should not be too ambient, because they are looking for rather close sound. Also position of musicians had to be discussed, to give optimal compromise between their comfort of playing and my idea of sound that I wanted to achieve. My idea was that marimbas should be positioned on the left and right side in order to leave the space for vibraphones in the center. It was critical that musicians could hear each other good, so we tried few positions until everybody was satisfied.

Recording method and postproduction

I put 4 baffles behind the ensemble in order to reduce the room sound. It's rather big space, so I also used curtains to attenuate reverb a bit. I chose 2 main systems: AB and MS. I chose M to be cardioid microphone in order to have rather dry sound, but still enough room information thanks to Side microphone. I also wanted to be in control of wideness, and MS allowed me to do it. I wanted wide stereo image in order to give enough space for all 4 instruments. In case I had to add room sound, I still could mix in a bit of AB. Apart of that, each instrument had spot microphone – for any balance issues.

During mixing I decided that my main sound will come from MS, with a little bit of AB for nice low end and feel of ambience, with marimba spots practically unused. I used vibraphones spots in order to underline their position in stereo image, as well as to give them a bit of "shine" through relatively dark marimbas that created a "cloud" of sound. I liked the contrast between those instruments in this piece, and I wanted to enhance it. No artificial reverb was added. I used gain level automation on vibraphone spots microphones when I had a feeling that it was necessary, mainly to compensate for a fact that one player was a little bit softer in certain parts.

The first movement is almost meditative music. Repetitions bring listener to kind of trance, while middle part focuses attention on "little" sounds of instruments and detailed changes of colors.

Problems

I had to convince musicians to position them the way I wanted. They were used to play this piece in a way that 2 vibraphones are in front, and marimbas are behind them. But that did not fit my vision of stereo image I wanted to achieve, so we tried few positions, and the final one is in my opinion perfect for this piece.

During postproduction it turned out that it was quite difficult piece to edit, due to its repetitiveness. Score was virtually useless, therefore I had to use my ears and navigate through the piece with use of some characteristic moments, such as loud chords, and align all takes using multiple sources in Pyramix. The piece is also very difficult to perform, therefore there were moments during session when we had to stop and agree with musicians what actually had to be played.

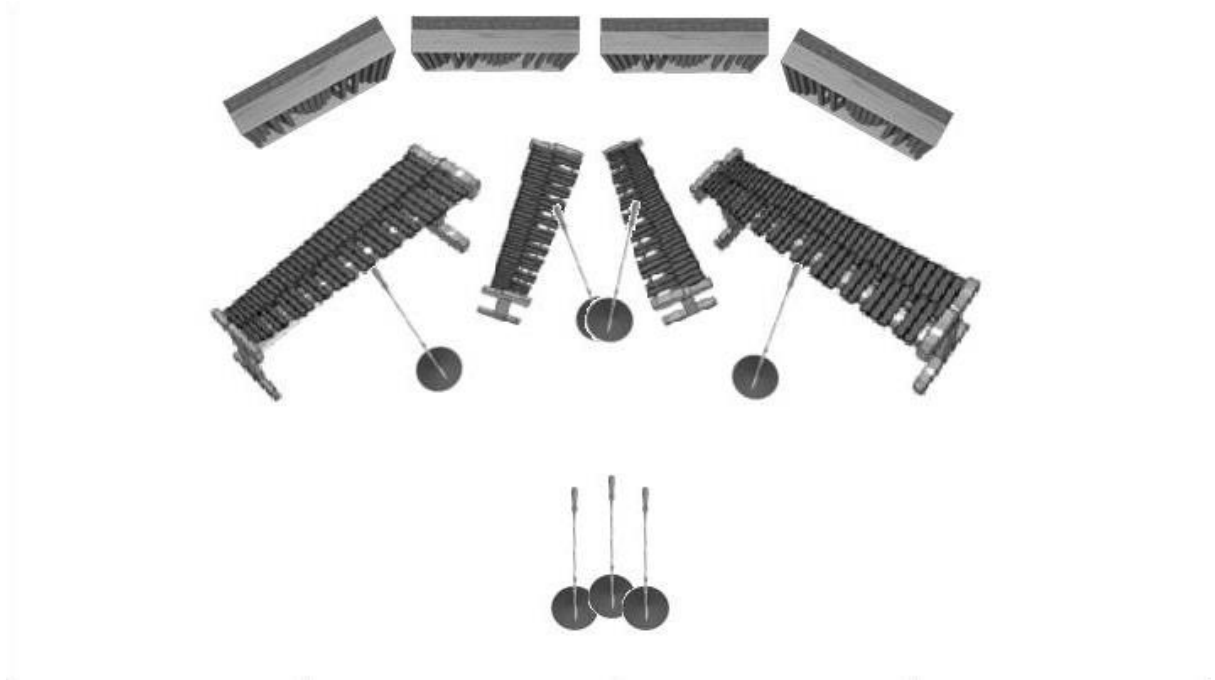
Evaluation

This was a great project and I learned a lot from it. Overall I am happy with the result, musicians also.

Recommendations

I think that especially in case of so unusual setups it is very important to discuss with musicians what are their expectations, and then to think in advance of tools that will allow us to fulfill these expectations.

Stage plan as seen from above:



Measurements:

AB and MS height: 260cm

Distance AB&MS to vibraphones: 270cm

AB width: 68cm

Distance from instruments to baffles: 70cm

Pictures:





Screenshot of the session:

