

Sketch No.2 - Notes

October 14, 2009

In this assignment I have used Ableton Live as my main audio application, as well as making use of applications Peak and Soundhack, as I did with the piece for assignment 1. This is again due to the fact that I find it beneficial to work with multiple software, making use of the different strengths and conveniences of each of them.

While Live offers very useful options for playing back a sample, like easily looping a section of a sample, the order and timing of playing the samples and doing simple processes like transposing, reversing, changing the gain of individual samples, it does not provide a tool for actually editing the sound files. Therefore an editing software like Peak or Audacity is necessary – Live opens up the specified editing program when the edit button is pressed. I used Peak for the editing needs and also for applying simple processes like pitch changing to individual sound files. I find this way of working convenient because, similar to Logic, there is no way that I know of in Live to apply processes to individual samples. All processing is done with the plug-ins inserted to the channels and even if the sample to be processed is very short, it needs to occupy its own track to be individually processed. While this method works ok, I find it more intuitive to be able to process individual samples. However since I needed to use the effects in Live, I ended up using both methods.

The techniques I mainly used include looping, delay-based effects including rhythmic delays and reverberation, granulation, equalizing, filtering including resonant filters, ring modulation, pitch changing, convolution and panning. I also used the launch settings in the session view of Live to create a random playback sequence of different samples and the live recording ability to record my control of the parameters of the processes applied to samples. For looping, I used both the looped playback in the session view and copying/pasting of the samples in the arrangement view side by side.

There are three main loops in the piece. The first one makes up the underlying sustained sounds heard throughout the piece. I applied equalizing, using the EQ Eight plug-in in Live, reverb using the Reverb plug-in in Live, based on the Cathedral preset recorded it live from the session view playback. I applied the Resonators plug-in to create pitched sounds out of the fairly broadband sample. Then while recording, I varied the frequencies of each of the resonant filters, thus changing the pitched sounds, as well as varying the center frequency of the band-pass (or band-reject) filter in the plug-in. The second loop is made up of a single sample pitch shifted one and two octaves down, following each other. While I used the transposition function in Live with many melodic elements in the piece, since this function preserves the timing of the sample, I used the pitch change function in Peak for the samples in these loops. Apparently there are strong capabilities in Live regarding time and pitch changes, with the use of warping engine but since I couldn't figure out what exactly it does I choose not to use it for such effects to avoid

using it unintelligibly (I think Live uses this whether I want or not to fit the samples in beats but I am not sure). For the last loop I used Tom Erbe's +bubbler plug-in to obtain a granular delay effect. Again I looped the sample in the session view and varied the delay time, variation rate of the delay time for each grain, feedback, variation rate of the start point of grains, the size of grains, pitch changes for several grain streams, octave variation rate and the mix amount with the original signal while I record.

For different ornamental sounds I used several settings of the Reverb plug-in for desired reverberations, and Simple Delay, PingPong Delay and Filter Delay plug-ins to achieve different rhythmic delays, at times delay taps being filtered. I also used the Frequency Shifter plug-in to ring modulate some of the short sounds to change their timbre and character. To get some of the sustained sounds towards the middle of the piece, I used auto-convolution technique. I convolved the sound file with its identical copy, using the SoundHack application. Similar to my piece for assignment 1, I included the original samples along with their pitch-shifted versions. I like this approach because I think it provides some kind of coherence. For panning and overall gain changes in the tracks, I used the automation abilities in the arrangement view.

The several configurations I made to the application are changing the warping setting to default at complex rather than beats, specifying Peak as the default editing application, setting the output buffer size to a larger amount of samples to avoid crashes, and installing Tom Erbe's delay trio plug-ins. However, I did not make any major modifications to the application itself.

As with my piece for the first assignment, I honestly can't think of any piece or a style of an artist resembling this piece. I partly blame my non-music educational background, but my embarrassment grows due to my limited musical repertoire. Again, I think I am more influenced by the processes involved than by existing pieces and perhaps for this reason I do think this piece is somehow similar to my piece for the previous assignment in terms of the ideas involved. I tried to extend the ideas I used and introduce new ones but I still think I could not depart radically from the ways I work, which is not something I particularly like, but on the other hand it feels like an evolutionary process.

Once you get used to working with, Live is a very useful application in terms of providing many ways to work. Having two modes of working – session and arrangement views – allow to benefit from two different paradigms. While in the arrangement view you can work time based, as in the DAWs like Logic, in the session view it is very easy to play back samples with relation to each other. I used the arrangement view to lay out the sounds in the specific times I wanted them and do time based automation of gain, panning etc. The session view made it very easy to realize performative ideas. I could easily play a loop, modifying the processing applied to it and simultaneously record my performance without having to deal with any routing setups – in Logic I had to route the output of the channel I am playing

and performing on to a bus and record it on another channel. Separation of a very powerful playback capability from the fixed-time paradigm is really handy. Another thing that has been very helpful is the ability to create a specified or a random playback sequence of the samples. This way I could easily create the two semi-random sequences in the piece. Additionally, the effects (plug-ins) in Live are very cleverly designed and are very flexible, though many of them are not transparent as to what they actually do. Most of them have special or short names instead of the standard terminology, and often this makes intelligible use of the effects depend on guessing.

Live assumes that all music fits into bars and a certain tempo. It adjusts all the samples to fit in a certain bar and it adjusts its length according to the tempo. It also plays back the samples at certain beats (I found out later that this could be changed by setting the quantizing to none). In the sample display it doesn't show the length of the sample in seconds, it shows it in bars. This makes it hard to make specific adjustments in terms of timing and sometimes the process of fitting into the beats changes what the sample sounds like, which is very annoying. The more you get used to using the application more easily you can make it behave like you want but I don't like the software I am using to suggest or enforce a way of working or making music. With Live, this suggestion is pretty strong and it feels like it is not entirely necessary; it could easily have been more neutral. For example having an option to base timing on seconds could be added, as the option in some of the delay effects. Some other features I would like to see in the application are built-in editing of samples/clips, ability to apply processes to individual clips or selections, more advanced ways of organizing the playback sequence of the samples.

While it is possible to work in Live in a way almost identical to working with DAWs like Logic (in arrangement view), working in a non-linear way as in the session view is substantially different. After getting used to working in a fixed-time fashion in Logic, where I specified the timings of and effects applied to the sounds exactly as I wanted graphically, before hearing what it sounds like, I felt a little disoriented trying to make music in the session view. The main difference is that the creation of music is all based on live performance, as the name of the application suggests. Looping and follow actions provide a preconceived notion of timing but there is nothing similar to a graphical representation of the fixed sound elements. The quantization to certain beats was also a problem for me since at least I wanted to have real time control on the exact time I want a sample to play. I realize that it is a useful thing to have, if nothing else, because one can only control a limited number of samples at a time. However, as an addition to the features I would like to see, it would be great to be able to select which clips to be quantized and not. However, the possibilities that come with such live performance (or automated performance / composition) features are very hard to achieve in fixed-time paradigm. It is very useful to have both ways of working under hand and I ended up working in a combination of both ways.