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MMT Y1 – Nov 2015

Electroacoustic Composition 1: Assignment 1 – Soundscape Composition (Report)

Recording Environment: Woodland & Countryside, Co. Donegal

Equipment: Zoom H2n & H4n, AKG Perception 220

Sound: Birdsong

Title: Ardán a Glas (Platform to Green)

Location Choice / Theme:

As I live in rural Ireland, rich with plant & wild life, I decided to take an Ecological approach to my piece. I achieve this by highlighting the abundance of green landscapes and animals through my recordings, and further accentuate this in my composition. The main sound I use to indicate this environment is birdsong. Although birdsong is generally a Keynote Sound, as defined by Murray Schafer, every morning I walk through this area the birdsong can be almost overwhelming when you pause for a while and take in the auditory landscape before you. With this in mind, I developed the concept of using birdsong as an indicator of the lush and abundant "green" landscape. So now my birdsong would change in my composition from a Keynote Sound to a Sound Signal. I also wanted to capture another element of this environment, which both indicates the green landscape, and is essential for it's existence - 'water', both in the form of streams/rivers and rain (which was recorded accidentally while getting caught in a short rain shower during one of the sessions).

Ten Questions for a Listener (Answers & Discussion):

1. My sound has multiple characteristics: Melodic, complex, rhythmic, colourful, tonal, polyphonic, sequenced, and instantly recognizable.

2. Depending on the time of year, every morning from 6am until Mid-day, but can still be heard sparsely the rest of the day (in Summer though it will be almost constant until sunset).

3. Given the large numbers of birds populating the area, it's almost a constant sound (weather permitting). The songs appear in varying repetitions and sequences of a second or less, in a rhythmic format, and at times can be an interactive occurrence between two points.

4. Farms are quite common in rural areas, so cattle, dogs, donkeys, etc. can also be heard in my area, which I think are very much complimented by the birdsong. The near by rivers and streams also go hand-in-hand with the landscape, and again are complimented by the birdsong.

5. Birdsong I feel illuminate the trees and green fields in the area, given that it's the natural habitat of birds.

6. Symbolically green landscapes and the natural world/wildlife can be represented by birdsong. When one hears large cacophony of birdsong, you cannot help but picture trees and green fields, and imagine vibrant wildlife.

7. Although you would generally associate my sound with rural areas, parks are also very common in cities, and therefore you will also hear birdsong in those areas.

8. Growing up in rural Ireland, my childhood is filled with memories of full summers spent in the woods exploring – so most definitely I can associate this sound with these memories.

9. As the day grows, the frequency of the sound diminishes ever so slightly, and the sequences become a little more sporadic.

10. My sound contributes an audible indication of wildlife and a healthy natural landscape, and for anyone in that area at the time – relaxing melodies constantly colouring your surroundings.

The ten questions definitely helped my development of the whole concept behind my piece. The answers did not change as my piece developed, but instead had focused my direction and approach to the composition significantly. This was especially evident from questions 4 to 6, forcing me to think how my sound is an intimately relative part of my

environment from an auditory perspective, as it both identifies with and symbolizes the environment. As I began to work on the analysis of the recordings other answers I had to the questions were also further reinforced by my study of the sounds in Audition's spectrogram, such as question 3, seeing with incredibly clarity the almost constant and repetitive sequences displayed by birdsong.


Field Recording:

I spent a total of four days recording in my chosen environment, using both the Zoom H2n and H4n on separate occasions. As I have spent much time in this area, I had several secluded locations where I knew I would capture much of the audible wildlife in the area. I took several long takes (between 10-20mins) and gathered multiple recordings from each location and session, including a few direct recordings of a nearby stream, and the accidental rain shower (equipment was protected by umbrella). As I also wanted to emphasize water as a secondary sound, one of the sounds I used in the piece was a water drop, which I actually created using my mouth and recorded in my studio using an AKG Perception 220. These water drops could definitely be described as Abstract syntax, creating a sound not related to the source.
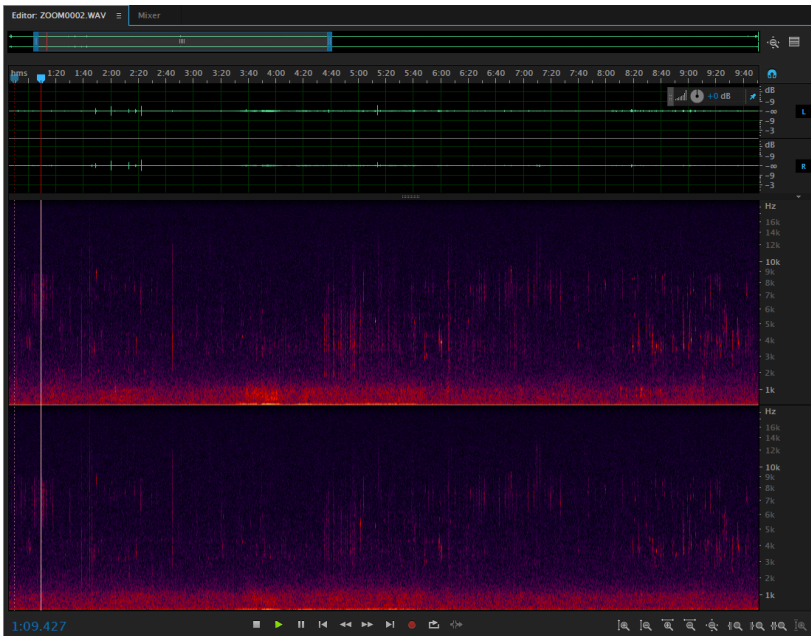
Recording Organization & Analysis:

Once I had a sufficient bank of recordings, I organized all the takes and began analyzing them in Adobe Audition using the spectrogram. It was in the spectrogram that my description of birdsong having a sequential property was massively highlighted, as you could see in real-time the rhythmic nature of the sound and follow its sequences, as well as seeing where it sits on the frequency band (which they occupied very specific frequencies in the higher register). With this incredibly accurate visual representation of the birdsong, you can also make out that certain birds create polyphonic sounds, complex melodies & note patterns. I would then use the marque tool to cut sections of bird song, and use the lasso tool to isolate individual birds. I found the time and pitch utility in Audition which very effective at manipulating some of these takes.
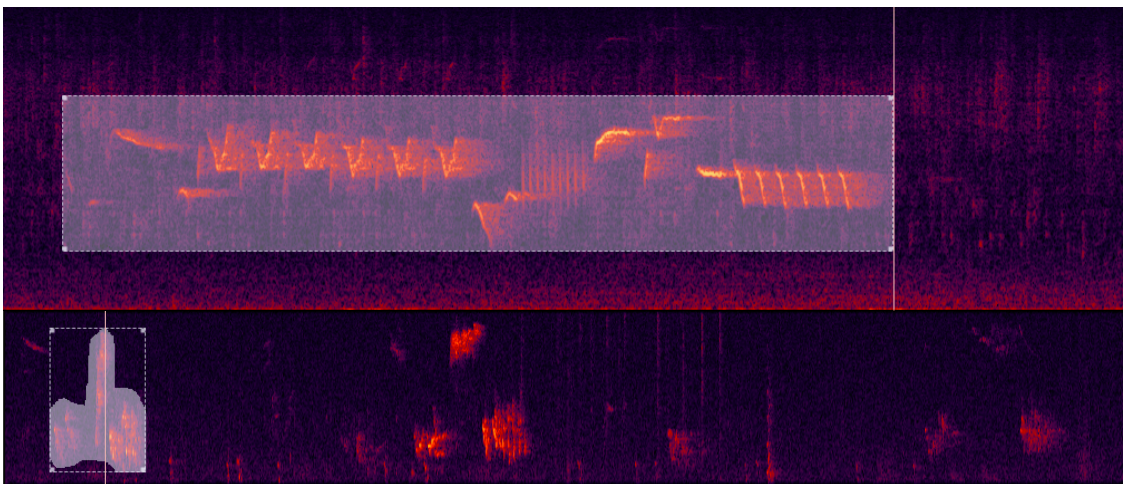

Using marque & lasso tools to carve out sounds;
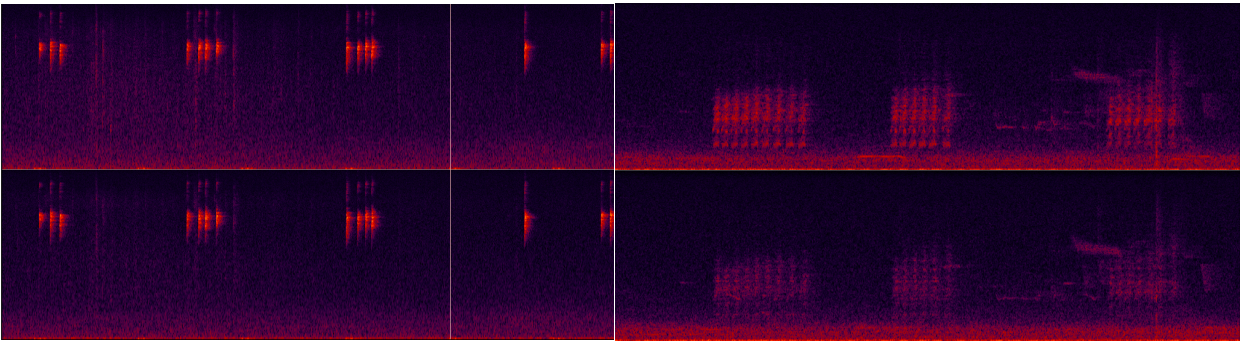
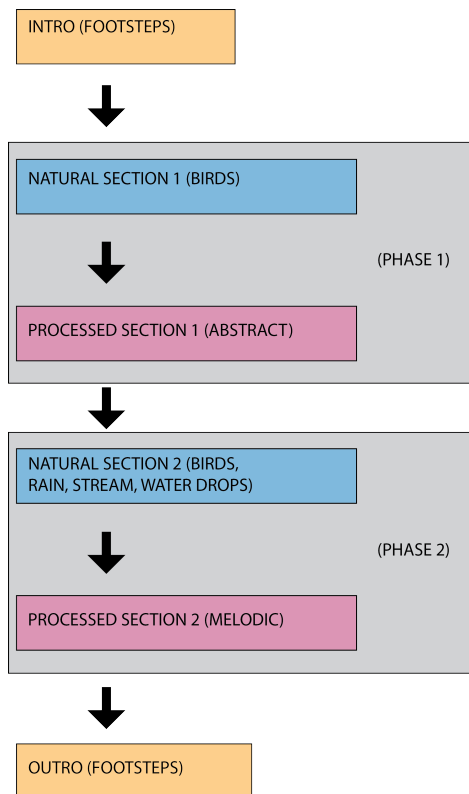*Sequential birdsong example;*   *Polyphonic birdsong example;*

PaulStretch was another great tool for transforming audio, using the harmony and octave functions, as well as the various stretch times and sample resolutions to create some incredibly intriguing results. One of which had actually turned the noise floor into a drone, and the birdsong into a quite stunning array of melodic sounds accompanied by the drone. This drone I think is an example of Abstracted syntax, extracting the melodies from the source sound.
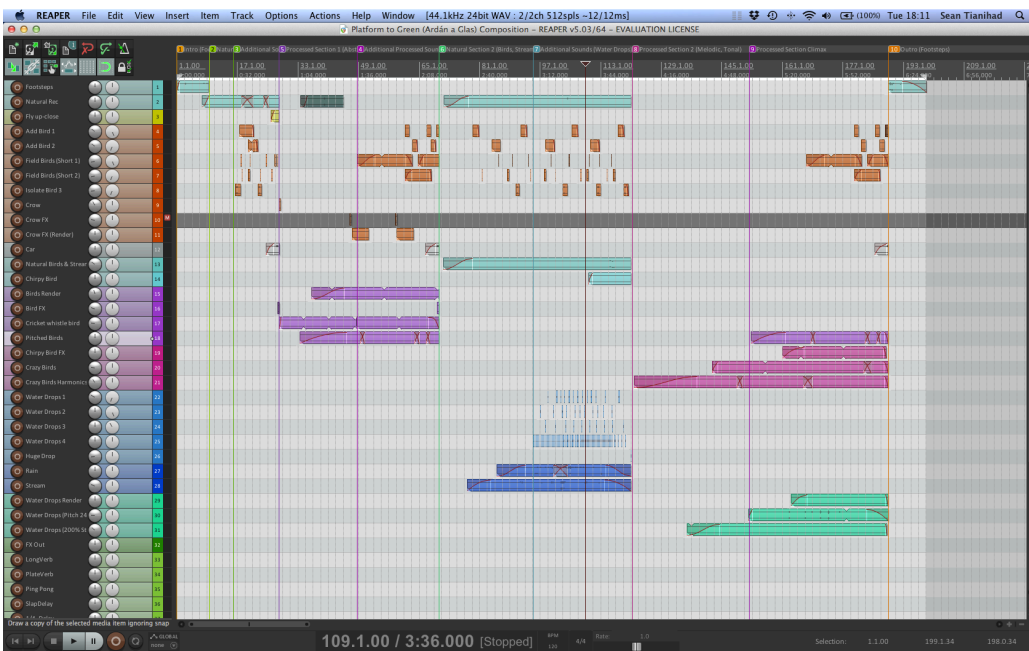
Composition:

The title "Ardán a Glas" is Irish for 'Platform to Green', which is the idea that the piece is a platform for this green landscape to be heard, and this is further emphasized by the footsteps you hear at the beginning, which is meant to represent the listener physically walking up to the 'platform', and once the piece finished, footsteps are heard walking away - leaving the platform. The Landscape is identified by the birdsong, stream, and rain, as well as various Keynote Sounds (cows, trees rustling, etc). Given the constant

reference of the piece to the source of the sound, I would define my piece as more of a Mimetic Discourse, as my piece reflects on the real-world aspect of the sounds in the composition.

INTRO (FOOTSTEPS)

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NATURAL SECTION 1 (BIRDS)	
↓	(PHASE 1)
PROCESSED SECTION 1 (ABSTRACT)	

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NATURAL SECTION 2 (BIRDS, RAIN, STREAM, WATER DROPS)	
↓	(PHASE 2)
PROCESSED SECTION 2 (MELODIC)	

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OUTRO (FOOTSTEPS)

My concept for the composition was not only defined by the sounds in the piece, but by the arrangement. The arrangement consists of two phases, both with a natural sounds section and a processed sounds section, and all sections to define & relate to the character and image of both the sound and the environment.

The first phase focuses primarily on the birdsong, the processed section of which expresses the more abstract and mysterious character of both birdsong and nature itself.

The second phase introduces water in the form of the stream and rain, and the self-made water drops, to mimic drops actually falling into a puddle or pond up close (this also reinforces the concept of the rhythmic character of birdsong). The processed section of phase two expresses the melodic and musical aspect of birdsong, and uses both manipulated bird sounds and manipulated water drops (to again reflect on the rhythmic nature of birdsong).

From spending much time in my environment, I find that sounds seemed to flow from one to another (more exaggerated by distance), and I tried to portray this with every section building into the next section using a smooth transition usually achieved by reverb or delay. The plugins varying from Soundhack's Bubble & PitchDelay, Hysteresis, Tal Dub III, and Valhalla FreqEcho.

Arrangement - Phase 1:

The natural section of the first phase as previously mentioned, focuses on birdsong, with the initial unedited clip then slowly introducing more birds to highlight birdsong as the main element of the section. There are other Keynote Sounds present in this section, some distant cars, wind, trees moving, and leaves rustling. The transition into the processed section I use a car that was recorded passing by, which without editing, moves from one side of the stereo image to the other - and then used a distorted crow with some reverb to spill over to the next section.

The processed section of phase one uses pitch shifting and time stretching to exaggerate the more abstract properties of birdsong. Other effects used here were delays & reverbs to achieve a Non-Real space, which complimented the abstract nature of this section. There is also one repetitive high chirp, which is almost sounds like an alarm unprocessed, and transforms natural to quite unnatural over the duration of this section.

Arrangement - Phase 2:

The natural section of phase two introduces water into the piece. First a stream slowly brought in, then it starts to rain, and at this point the water drops start to play in a rhythmic but slightly sporadic sequence, trying to be as real as possible. The various drops recorded by myself, and I used slight pitch difference and panning to make them more distinguishable against each other, with one last isolated drop to mark the end of that section, and a long reverb tail to smooth out the transition. The final processed section uses both processed bird sounds and water drops, to create a climatic finish, using multiple tracks, layered with fx sends, and automating these parameters to built into a ever growing wall of sound, and then drop out to just the footsteps walking away, and the piece ends. I achieved this clean cutoff of effects by grouping all the fx sends into an auxiliary buss, then automate the volume to cut out at the point the footsteps start.