Sound Design Assignment Two:  
DECO1103: Sound Design and Sonification  
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Introduction

The data I have selected for this assignment is off a popular surf website, Coastal Watch which is a popular site that gives surf forecasts and reports. I chose this data, as it is data that I can relate to as well as scope to make a sonification of it.

Data Breakdown

The above image ([www.coastalwatch.com.au](http://www.coastalwatch.com.au), accessed on the 25/10/2010) shows where the data for the signification is sourced. It shows the wave heights in feet in the blue graph, and the predicted wind speed in knots. This data will converted into a text document so it can be loaded into a MaxMSP patch and used to make the sounds I desire. The data I have used in a selection of different conditions over many weeks.

MaxMSP Patch

The two data elements obtained from coastal watch were treated to different treatments in my max patch to obtain the corresponding sounds. A multiplier to give an input for the volume of the noise created divided the wave height. The smaller the wave the quieter it would be. I selected 6-foot waves to be the ideal volume as these are the best size waves to be surfed. The rest of the sonification is balanced around that number 6-foot wave with the smaller being noticeable quieter and the bigger waves being louder.

The wind speed is also another major factor in surfing. Too strong and the waves will become wind effected. With this in mind I decided that the wind speed would change the pitch of the noise. Using a multiplier to change the given data by a
factor of 100 did this. This allowed the high wind days to be a higher pitch while the low winds days to be a nicer sound lower pitch noise. Once representing that a nicer noise equalled better waves.

By combiner the two the data has produced a sound, which shows the different conditions. If the data were given over a week of similar conditions it would sound very similar. If however there was a stand out day in that week, it would sound recognisable enough to sound different.

The layout of my max patch goes from top t bottom. All the relevant information and explanations are in the patch and accompanying picture.

The max patch also contains two graphs, which graph the pitch of the produced sounds. This was done to give a visual representation of the sound.

Explanation of sonification (in same order as sound file).

<table>
<thead>
<tr>
<th>Wave</th>
<th>Wind</th>
</tr>
</thead>
<tbody>
<tr>
<td>6Ft</td>
<td>3Knt- The ideal wave, volume and pitch sound the nicest together</td>
</tr>
<tr>
<td>1Ft</td>
<td>40Knt- Smallest wave, Very quiet and high pitch</td>
</tr>
<tr>
<td>3Ft</td>
<td>17Knt- This wave sound is located between the above two waves</td>
</tr>
<tr>
<td>9Ft</td>
<td>10Knt- Louder and higher pitch than the ideal wave</td>
</tr>
<tr>
<td>12Ft</td>
<td>20Knt- This wave is twice as loud as the ideal wave because of the size and has a higher pitch because of the wind.</td>
</tr>
</tbody>
</table>

Evaluation

I believe my Max patch and sound output is a good reflection of the data I sonified. It gave a distinct difference between different days waves as well as allowing similar days to sound the same. I had a far idea from the outset what it would sound like, but it worked better than I thought it would. While the patch isn’t overly complicated it does the job of producing different noise that can be associated with different conditions. Along with the visual aid of the website and graphs (like above), as well as the webcams coastal watch has, the sonification I have done has added another level of realisation of the surf conditions. This is important as sound mixed with visual builds a much greater picture of what is happening than if they stood alone.