

Figure 1. The interface of the game, as seen on mobile.

4.1 Freq Blender by Amanda Andrén

This sound design uses the standard waveforms included in the OscillatorNode. I used sine-, sawtooth-, square-, and triangle waveforms. The one that it did not use was the custom waveform, that is because I thought that four different waveforms were enough. All the waveforms were included in the Mixer. Two sine waves were in the Mixer, this was because I wanted the second one to be the first overtone to this tone.

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4.2 Polyphonic Loop by Tove Grimstad Bang

This sound design consists of a looping sample of strings, from freesound.org [10], and a synthesised sound with a continuous pitch change mapped to the gesture across the horizontal axis in the touch area, from low pitch on the left to high pitch on the right. The sound is a synthesised string sound, made by TJ O -11.955 Td [(up)-347(of)-348n)w tween, and spans over two octaves from D2-77.78 Hz to D4-311.13 and A2-116.54 Hz to A4-466.16 [11].

4.3 Air Whistle by Carlo Barone

This sound design was created keeping in account the results obtained by Godøy et al. [12], who analyzed the relationship between sound and gestures performed on a 2D surface, and the nature of such gestures, depending also on the musical ability of the participants. In this experiment certain correlations between gestures and heard sounds, which had been empirically described previously, nevertheless lacking a scientific proof before the aforementioned study, were more methodically analyzed and established;

4.4 Spring Harmony by Gabriella Dalman

There were quite a lot of possibilities in this sound design

4.5 Cinematic Chaos by Johannes Loor

When designing my sound, I started with the idea of go-

4.7 Robotic Voice by Markus Wessén

This sound design is based around the idea of creating a sound that most humans already know and has learnt to

the sample, the gesture-sound mapping is indeed limited. However, it is worth mentioning, that from the enjoyment-mapping correlation, 4.2 is an outlier, with a high enjoyment rating and a low mapping rating as opposed to the other sound designs.

While the use of a synthesis on top of a sample was made with the intention of inciting gestures in the users, through exploring harmonies and gestures, the low rating on mapping might point to the sound design not living up to the intention. However, the high rating of attentiveness might point to the sound design being able to grab the user's attention in a positive way.

The stored gesture up for imitation was perhaps too long, and with quite a complex musical output from a very simple gestural input, might have been efficient in terms of grabbing the user's attention, but is likely to have taken a toll on the mapping [6, 7, 18].

6.3 Discussion of 4.3, Air Whistle by Carlo Barone

A first significant outcome about this sound design is deducted from figure 4: is it noticeable how it was consid-

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