

The Rabbit's Journey

Narrative

This film tracks the difficult and brave journey of a rabbit whose home has been wrecked by a falling tree. After realizing its life has changed forever, the rabbit must find a new home, so it travels to a prairie nearby. However, the air feels very tense and the rabbit soon spots a wolf lurking nearby and has to travel further to the mountains. This new area seems habitable, until the loud croaking of the frogs is unbearable for the rabbit, and it has to explore new lands. The rabbit moves to a nearby industrial town, where the loud construction and sparse grass persuades the rabbit to leave. Finally, the rabbit finds a lush, calm meadow to live in and settles down.

Effects used

From 0:05 to 0:11 I used a repetition of a 10-pitch-period sound from a recorded vowel that has been approximated by two cosines, or the first two terms in a Fourier series summation (Lab 1). The noise is coming from the falling tree and is what grabs the rabbit's attention. From 0:16 to 0:18, original frames were up-sampled, then linearly interpolated, to give the effect of slowing down video (Lab 7). The effect is used to dramatize the rabbit's mental state; it slowly dawns upon the rabbit that its home is not habitable anymore and its choices are very black and white, either stay and risk being in danger without a home, or travel to find a new home. From 0:33 to 0:36 the rabbit spots a wolf in the far distance, hence the blurriness. The wolf image has random noise added to it, then is filtered using a row-wise averaging filter that made the image more clear but still blurry (Lab 4). From 0:54 to 0:57 and 1:00 to 1:03, I used a notch filter to remove interference from a frog chorus recording. The frequency removed is at 2441 Hz and the pole magnitude used is 0.98 (Lab 5). The repeated, loud frog noise makes the rabbit leave the mountains and look for a new home. From 1:21 to 1:25 and 1:41 to 1:45 I recorded a box of coins being shaken to imitate the noise found in a metal city. I then took the recording and added a feedforward delay to give an echo (Lab 3). From 1:37 to 1:41 I repeated a sound made from adding two high frequency damped sine waves, shown in algorithm below, to produce a kind of honking sound the rabbit hears in the city (Lab 2).

$$x[n] = 1 * e^{-n\pi 100/8000} \sin\left(\frac{n2\pi 900}{8000}\right) + 0.75 * e^{-n\pi 100/8000} \sin\left(\frac{n2\pi 1200}{8000}\right), 1 \leq n \leq 80/3$$

From 1:46 to 1:48 I used a noisy picture's plotted level spectrum, because it looks like a star, to act as a transitional image from the city to meadow (Lab 6). The star symbolizes that the rabbit finally accomplished its goal of finding a new home.