CAIN
Synthesizer

WTF II

Prolog

The WTF II user oscillator is the second result of a challenge, which was put on my by my brother Mike, who is so kind to provide the visual artworks for all my creations. He created a brief sketch of a potential oscillator and asked me, to make it sound:
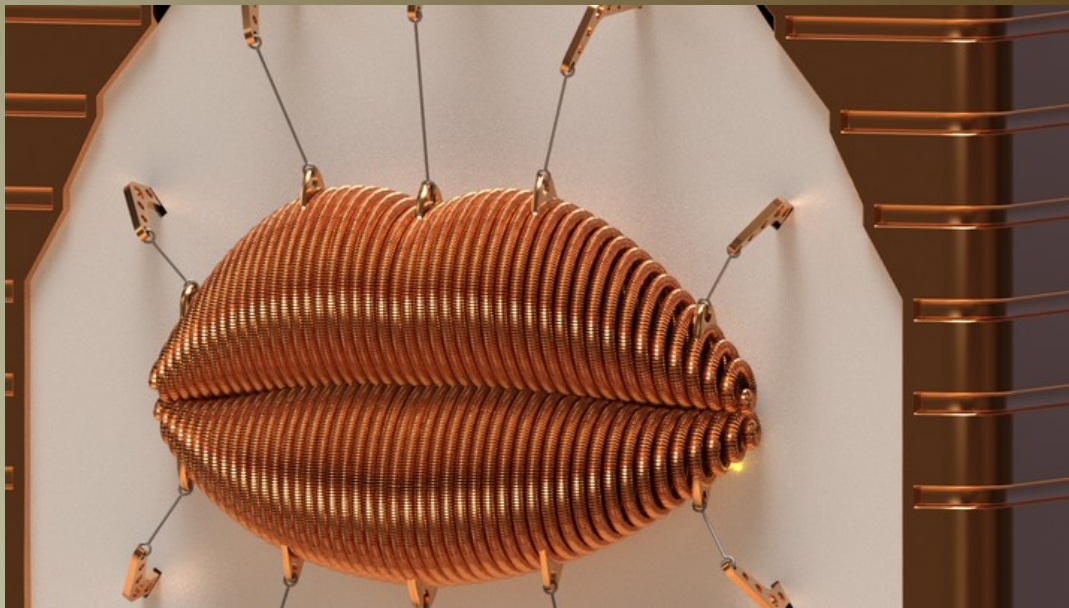

It had a mouth and some kind of tribal aesthetics, so I came to the conclusion that it is the long sought after spooky, babbling and whispering oscillator everyone desperately needed.

My personal challenge was how to create such an oscillator, by synthesizing vowels and consonants. Simply using samples was not an option for me. Since I already gained some experience with vowels by creating the HUMAN

oscillator, it was now time to strip it down and to start to work on creating consonants.

The most useful papers for that work were actually papers, which analysed Sonograms. I learned that there are plosive, nasal, fricative, sibilant… and many more types of consonants. To make a long story short, you now have either the chance to use this oscillator and maybe donate what you think it is worth to you or just hire me as a speech therapist.

Once I got it babbling, I did a first demo to my brother and then his creativity kicked in, so that he completely redesigned the visuals, but it is up to him to make a 'making of' story on the design.

Features

Sentence	Parameter 1	Chose one of 19 predefined words or phrases or let it create random syllables 1. Cain Synthesizer 2. What the f**k 3. Pop, pop – pop music 4. Hey now, hey now now 5. One, two, four – techno 6. All your base are belong to us (thank you Aki 2onen!) 7. Start ignition 8. one, two, three, four 9. eins, zwei, drei, vier 10. ichi (一), ni (二), san (三), chi (四) 11. uno, dos, tres, quatro 12. machine 13. Maschine

		14. Mensch 15. artificial 16. human 17. KA MATE 18. KA ORA 19. TENEI RA! 20. [random syllables]
Detune	Parameter 2	Add a second frequency to the oscillator from pure over detuned all the way up to an octave. 1. one single frequency 2. subtle detune 3. detune 4. +3 (minor harmonic) 5. +4 (major harmonic) 6. +5 (5th sound) 7. +7 (7th sound) 8. +12 (octave up)
Character	Parameter 3	The the natural formant character changes depending on whether there is a bass, tenor, counter tenor, alto or soprano singing. 1. The character is spread across the keyboard 2. bass 3. tenor 4. counter tenor 5. alto 6. soprano
Wave	Parameter 4	Instead of only a glottal impulse you can chose from the following waves as exciter 1. glottal impulse 2. square wave 3. pulse 4. thin pulse 5. saw
Speech	Parameter 5	Add some pitch modulation to each triggered syllable to have a more speech – like impression. (To be used in conjunction with Portamento) 1. Off 2. On
Portamento	Parameter 6	Add a glide between the notes you strike. (also put this to around 3 to hear the effect of the Speech parameter)
Creature	Shape	Use the shape button to define the size of the vocal tract of the synthesis. From 0 like a giant to .5 like a human to 1 in Minion style

Whisper	Shift Shape	Change the balance of glottal or wave excitement vs. only an exhaling sound to get that eerie whispering effect.

Legal stuff