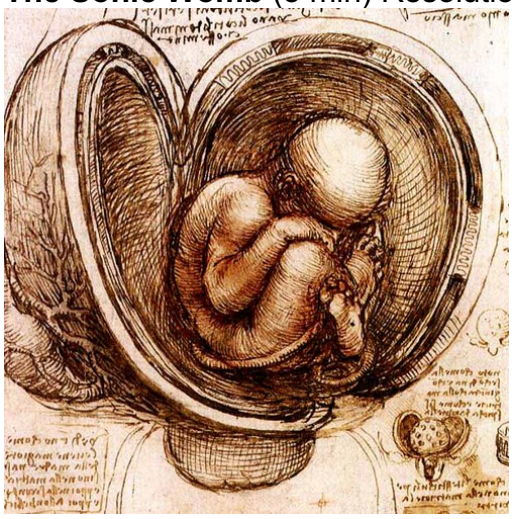
The Sonic Womb (5 min) Resolution, Goldsmiths, 2nd March 2018



The Sonic Womb allows the audience to hear the world as a baby hears it inside the womb before it is actually born. The presentation is part of a biomedical research project on fetal hearing, rather than an artwork as such.

It may come as a surprise that a baby's hearing is fully developed from six months onwards. For the last trimester sound provides the fetus with its only sensory contact with the world. Their auditory stimulation comes from three different sources: the outside world through amniotic fluid and the wall of the uterus, the inside world of the mother's heartbeat and digestive gurgles; and thirdly the mother's voice as this conducted from her vocal chords down her spine.

The fetus hears these sounds not through the outer ear (as these cannot function under water), but via its skull directly to the middle ear. The objective of the research is to model the auditory transfer function of the mother's body – with the aim of making medical profession more aware of the need to protect premature babies from the highly damaging effects of auditory stress.

The Sonic Womb soundtrack introduces a "fetal filter" to mimic the effects of the mother's body as she is engaged in her everyday activities. This is presented as if the audience was entering inside the auditory world of the womb and re-emerging out of it at the end. The SIML sound system is configured to produce a mono mix in which frequencies are spread vertically from bass on the floor to treble on the ceiling (exactly as for the Eko sonographic episode).

Sonic Womb Productions Ltd was founded in 2013 by Professor Julian Henriques, sound system researcher, filmaker and artist, Goldsmiths; Professor Eric Jauniaux internationally renowned expert in fetal medicine, Institute of Women's Health, UCL and venture developer Aude Thibaut. https://sonicwomb.tech/

Credits:

- Concept: Julian Henriques, Eric Jauniaux and Aude Thibaut
- Sound and fetal filter design: Dan Scott
- SIML Sound engineering: Edward Cain, Charles Vaughan and Henrik Blomfelt (Resolution)