## The Body is a Vessel

Robin Meier, 2010



Performance for Freediver and Computer (variable duration, minimum 15 minutes). Produced by SuperCollider Symposium 2010 Berlin (September 25, 2010)

The Body is a Vessel is a musical composition determined and performed by the human body. Special microphones and sensors let us listen to the physiological processes of professional freediver Elisabeth Kristoffersen, while she is holding her breath.

Submerged under water, which is contained in a rowing boat on stage, Kristoffersen holds her breath for several minutes, letting us experience the physiological transformations she undergoes whilst doing so.

A diver's essential organization of time during preparation and diving form the basic structure of the music. The sounds of the heart, lungs, blood flow and diaphragm are used as musical

material and heard live in the hall. Using an EEG, changes of brain activity are made audible and take us even deeper into the diver's body.

*The Body is a Vessel* submerges us in a baptism set to the sounds of science. protective and exposing, this work explores the perspectives of human evolution.

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## Introduction

The Body is a Vessel is a musical ritual exploring the limits of the human body and possible futures for humankind and its physical shell. In 2000, shortly before his death, Jacques Mayol, the famous free-diver portrayed in Luc Besson's movie "Le Grand Bleu" (1988), publishes his book "Homo Delphinus – The Dolphin Within Man" imagining evolution of mankind beyond its landlocked barriers and transporting the future human body far under the ocean's surface.

"The Body is a Vessel" takes up this post-humanist promise to create a performance using modern-day technology in collaboration with professional free-diver Elisabeth Kristoffersen. Together, Meier and Kristoffersen embark on a journey towards the next step of human evolution.

## **Materials**

"The Body is a Vessel" uses various sensors to control electronic musical instruments in realtime with the performers body and the physiological changes it goes through during freediving.

An electrocardiogram (ECG) monitors and amplifies the diver's heartbeat. With a trained freediver the heart rate can drop down to 30 beats per minute and go up as high as 130 beats/ minute or more. Certain drops are triggered by physiological reflexes, eg. when the face is immersed in water. These dramatic changes in heart rate, the body's natural evolutionary adaptation technique, are the basic building blocks for the rhythmical structure of "The Body is a Vessel".

With an electroencephalogram (EEG) it is possible to monitor the diver's neural activity. During an initial relaxation period the general activity of the diver's brain will slowly decrease, thus changing the sound heard in the hall. After prolonged breath holding periods a diver's body will slowly reduce blood flow in certain regions of the body to limit oxygen consumption to strictly vital parts of the central nervous system. These literally breathtaking properties of the human body control the harmonic content of "The Body is a Vessel".

Finally a miniature microphone monitors and amplifies the divers breathing patterns during preparations and after the dive. It also allows us to hear contractions of the diaphragm, which are triggered by the acute lack of oxygen. A free-diver however, will consciously ignore these

audible and sometimes painful contractions to carry on and go beyond the perceived limits of our body.

## Conclusion

"The Body is a Vessel" explores the human body in its contemporary form using various technologies and tries to explore future perspectives of human evolution. But it also raises questions on the notion of the cyborg by using the body as a source of data for a musical composition; it questions the omnipresent commodification of the living: the common worldview considering living organisms as biological machines and the brain as a biological computer.