

**LABUTINEUSE**

singing bees

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## Summary presentation of the project

The Labutineuse project revolves around the recording of sounds and data from honey bee hives, reproduced in the form of performance including audiovisual installation, music and dance.

The data collected is then transformed into sound synthesis to deploy an installation through loudspeakers placed in empty hives. The dance amplifies the artistic purpose by offering a rereading of the communication of bees through their movements, and the musical performance will also include the participation of a singer.

Labutineuse is deployed in two production phases.

### Production 2022

- Sound installation

- Choreography

- Sung space

### Production 2023

- Audiovisual installation (sound synchronization, design motions and lights)

## Presentation of the context

Bees are at the centre of the news today. Essential actors of biodiversity, the current precariousness of their survival reflects many issues of our time: a link between consumerism and the environment, progressive urbanization of the natural space, questions related to the agri-food industry, interdependence between the different species of animals, including humans.

From the discovery of the tomb of a honey producer in Ancient Egypt to the engravings of beekeepers by Pieter Brueghel or the descriptions by Johannes Kepler, their complex social functioning and the almost magical character of their production, honey and wax, have always fascinated man.

The Labutineuse project was born from the dual passion of Yérri-Gaspar Hummel, musician and beekeeper, and founder of the Lab'ut structure which, around a creative studio based in Strasbourg, organizes concerts, workshops and other events related to music electronic news. The objective of Labutineuse is to offer, through a set of honey bee hives, a resource with multiple possibilities, open as much to the study of environmental issues as to artistic creation in general and sound in particular.

# The research

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## Capture phase

The first phase of the project consists of capturing both sounds and various data relating to the life of the hive, but also the atmosphere and smells that can emerge from the apiary (nervousness, external parameters, lights, wind...).

In order to better understand its functioning, the different capture phases will follow the natural cycle of the seasons, around which the life of bee colonies revolves.

In our continental climates, in France, the hive has two main annual phases: on the one hand, spring-summer, an active phase of honey production and reproduction of the colony, and on the other hand autumn-winter, the moment of wintering and total calm.

The swarms are in slow motion around the queen and thus warm up so as not to freeze. It is during the period of spring and summer, corresponding to the peak of activity of the hive, that the majority of data can be collected. The whole process will take place over a period of two years corresponding to two different types of recordings.

## 2022

Spring: capturing the first activities of bees

Summer: a study of reproductions and interior and exterior movements

Autumn: study of stocks and preparation for wintering

Winter: study of slow movements

## 2023

Spring: collection of data from the first pollens with a pollen trap and a counter

Summer: elaboration of the choreographic work for the performance

Autumn: implementation of a motion design (video clip). Theme on the bee and its «dance» and the communication of hives (pheromones and «dance of the bee»)

## Creation, planning

### 2022

April: rehearsal and surveys on the hives

May: ART ZOYD residency to prepare the media and sound modules for the show

June: rehearsal and creation on June 21 with L'UNISTRA

July: performance in Corsica Pigna Festival

September–October: representation of KEHL/STRASBOURG architecture days

### 2023

Developping choregraphy stage design and interactive installation

## The technique

The technical realization will be operated by a Pi-Raspberry/ARDUINO hybrid system for the management of raw data. The sound recordings will be made using a miniature recorder and very precise microphones (DPA type) to reproduce the audio and the different vibrations of the hive with the greatest fidelity.

The sensors make it possible to collect data in real time that we will store for their use in the sound installation.

The different sensors will be installed in order to collect data over variable periods of 1 to 10 days at different times of the season.

## The different sensors:

Hygrometer (measurement of the humidity level of the hive)

Thermometer (capture of its temperature and its ventilation)

Infrared camera (evaluate the mass of the swarm)

Counter (know the number of daily outings)

Anemometer (measuring the wind speed around the hive)

## Sizes

### The performance

Bees communicate with each other through a series of dance-like movements to guide each other in locating pollen. The dancer Lena Angster is inspired by this «bee dance» to create a choreographic performance around the sound installation, as a form of physical embodiment of the presence of bees in the show.

The singer Claire Trouilloud will improvise in dialogue with the electronic part to give an acoustic counter-melody to this song of the bees.

The performance is imagined for both adults and young audiences, allowing everyone to discover their relationship to the miniature world of insects.

## Installation (optional)

The public, in the center of the stage space, is surrounded by eight loudspeakers placed in empty beehives. Each hive broadcasts sound creations developed from recordings and data capture. The public is invited to freely enter the installation. Lounge chairs are installed on a carpet with cushions for contemplative listening to all four cycles of twenty minutes each, structured around the seasons.

This scenic space will be discreetly enveloped in lighting favoring neutral and soft colors: blue and pale yellow will evoke the colors of the sky and the sun in the same space. These will be projected on the peripheral walls in order to envelop the spectators in a soft and indirect light and promote immersion in the world of bees.

## The team

### Lena Angster

Lena trained in contemporary dance at the Strasbourg Conservatory. While following a TMD course, she collaborated from 2007 with the National School of Art in Nancy and participated in the creation of a multidisciplinary collective. In 2012, Lena joined the Coline training, during which she had the opportunity to work with Emanuel Gat, Thomas Lebrun, Sylvie Giron, Quan Bui Ngoc. She then worked with George Appaix, Fabrice Ramalingom, Odile Azagury. She is currently collaborating with two choreographers with whom she created the Compagnie RN7 in Strasbourg in 2017.

### Claire Trouilloud

Claire Trouilloud crosses the aesthetics of live performance and explores voice, sound, meaning, gesture. Soprano, she performs in France and internationally as a soloist and in many ensembles of classical, baroque, jazz, improvised music, opera, contemporary creations. She is at the origin of several shows and musical projects in which she deploys her creativity and explores the intersections of vocal, movement and theatrical performance.

## Yerri-Gaspar Hummel

(a.k.a. Kaspår) born in 1982, specializes in a musical practice centered around the notions of the situation of sound in space. Yérri-Gaspar Hummel is a musician, composer and director of the exhibitronic festival as well as the lab'ut sound research laboratory. In the Labutineuse project, he is in charge of the artistic writing and the subject.

## Michael Vierling

Musician and designer engineer of connected objects. He works between the ZKM and the group DlgitaleKUnstFabrik literally «the factory of digital arts». He works from Karlsruhe in many projects in which he develops an engineering between the sound universe and «sonic art». Trained as a drummer, he is also active in various hybrid musical projects.

## Creation calendars

Initially, engineers and technicians will work together on the content of the data collected. This research phase will develop during the spring of 2022.

A first phase of the project, still at the experimental stage, will be presented on April 8, 2022.

A residency hosted by the Art Zoyd Studio (Valenciennes) will then make it possible to focus on the performance itself, in particular by working with the dancer Lena Angster and the setting up of the sound hives (speakers installed in empty hives) . At the end of this residency, a first phase of restitution can then take place in different places.

# Provisional timetable :

## First phase, 2022

April 8 – iMACHINATION – Oppenau, presentation of the sound installation

June 18 – SYNESON – Strasbourg, working stage of the sound installation

June 21 – UNISTRA – creation of the complete performance (with dance, song and installation)

June 22 to July 1 – Place du temple – Strasbourg, presentation of the sound installation

July 25 – Voce – Pigna, Corsica, presentation of the sound installation and concert

August 1 to 10 – Place du temple – Strasbourg, presentation of the sound installation

September 25 to October 10 – Architecture Days – Strasbourg, complete performance (with dance, song and installation)

## Second phase, 2023

Festival NEMO – Paris – tbc

FARAWAY Festival – Reims – tbc

LOGELLOU Festival – Brittany – tbc

APO33 – Nantes – tbc

The essence of Labutineuse is to be a project in constant development. In a second phase of the life of the project, it will therefore be broken down into an audiovisual project, both with a motion design for the visual part of the installation, and with a technology for automating the various elements of the installation (sound, lights and video). The project will thus be oriented towards an interactive installation.

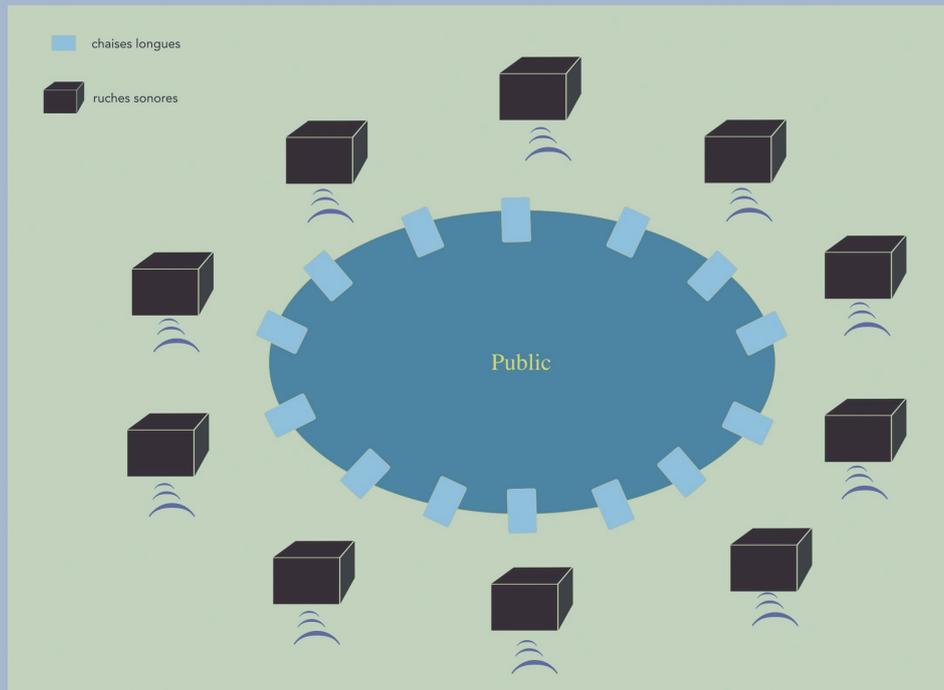
# Installation plan

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From 4 to 10 hives surrounding the public are placed in the centre of the hives (empty)

Either on deckchairs or on cushions

The hives are equipped with loudspeakers letting out the song of the bees



# Références

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LABUTINEUSE IS A PROJECT FROM LAB'UT STUDIO

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