

Project Plan: Mycelium Matrixes – Biogenerative Printmaking

1. Project Overview

This project investigates the potential of mycelium-based materials as a sustainable alternative to traditional printmaking substrates. Through experimental material development and printmaking trials, it explores both the artistic and environmental implications of integrating mycelium into print-based practices.

2. Research Question

"Can mycelium be used to create sustainable printmaking materials, and what are the artistic and environmental implications?"

3. Midway Project Draft

The Midway Project Draft will document the initial research and development phase, focusing on material experimentation and preliminary printmaking. It will include:

Material Experiments

- Detailed logs of mycelium substrate development, including both successes and failures.
- Visual documentation (photographs, and potentially microscopy images).
- Initial analysis identifying the most promising substrate formulations.

Printmaking Experiments

- Test prints on mycelium substrates compared to traditional print surfaces.
- Analysis of the printmaking performance of mycelium, including surface qualities and durability.
- Reflections on the aesthetic and material characteristics of mycelium-based prints.

Theoretical Framework

This project is informed by contemporary discussions around the current climate crisis, ecological materiality, and bio-art. The work of Donna Haraway, particularly her concepts of symbiotic relationships and ecological entanglements (Haraway, 2016), provides a key theoretical lens for examining mycelium as a living material within complex systems. The project also draws inspiration from artistic explorations of ecological themes and organic materials, as seen in the work of artists such as Patricia Piccinini, Emma Stibbon, Eamon O'Kane, and Janet Laurence.

Reflective Practice

- Reflections on the process of working with mycelium as a living material.
- Considerations of the evolving relationship between art, materials, and environmental awareness.

Project Plan Refinement

- Evaluation of progress and refinement of project goals or methodologies as necessary.

4. Project Timeline (Semester 1)

March 24:

- Project Plan Submission.

March – April:

- Refinement of mycelium cultivation techniques and substrate formulations.
- Continued documentation of growth and decomposition (time-lapse photography).
- In-depth research and analysis of Anthropocene and eco-art literature.
- Initial carving and test prints on cultivated mycelium substrates.

April – May:

- Comparative print testing on mycelium and traditional substrates.
- Development of a structured approach for the Midway Project Draft.
- Writing and compilation of the Midway Project Draft.

May 16:

- Midway Project Draft Submission.

5. Project Components (Final Project – Semester 2)

Mycelium Material Development

- A refined, reproducible mycelium-based substrate suitable for printmaking. Documented through a website showcasing process notes, images, and video documentation.

Experimental Printmaking Portfolio

- A series of prints demonstrating the technical and aesthetic potential of mycelium-based substrates.

Experimental Film Composition

- A creative documentation integrating time-lapse footage of mycelium and fungi growth, decomposition, and printmaking trials.

Dissertation

- A comprehensive documentation of research findings, including:
 - Experimental processes and technical notes.
 - Artistic reflections and environmental considerations.
 - Philosophical and theoretical discussions, grounded in arts-based research.

Exhibition

- A public presentation showcasing artworks and documentation from the research process.

6. Technical Considerations

- Mycelium cultivation, sterilization, and inoculation protocols.
- Substrate formulation, compression molding, and heat treatment techniques.
- Printmaking methodologies (both traditional and adapted for mycelium).
- Time-lapse photography and videography for documentation and presentation.
- Environmental impact assessment of materials and processes and ethical considerations regarding the use of living organisms in artistic practice.

Haraway, D. J. (2016, May 5). *Staying with the trouble* [Video]. YouTube.

<https://www.youtube.com/watch?v=p4L3ej6vyrE>