

Major Project Research

The focus for my major project will be the biophilia hypothesis, which is the idea that we are genetically predisposed to have an attraction towards nature. It was originally put forth by *Edward O. Wilson* in his published book '*Biophilia*'. Despite *Wilson's* view on the biophilia hypothesis being more aspirational than scientific, our humanely love for nature has been used to support many areas of study including the idea that being connected to nature makes us healthier and happier. (*Terramai, 2018*)

In his publication, *Wilson* states: "*I have suggested that the urge to affiliate with other forms of life is to some degree innate, hence deserves to be called biophilia.*" (*Wilson, 1984*).

The major threat to our existence is the state of our natural environment, *T. J Demos' Decolonising Nature* points out how we only have ourselves to blame. He discusses the global ecology and our fight to save the planet, while laying the blame on big businesses destroying local ecology, culture, and communities with the support of governments. *Demos* leaves us with a requirement for us as artists to cast off artistic autonomy and use more a more activist imagination to engage in social movements that could enhance our relationship with nature making us equals in a shared world. (*Elwes, 2016*)

Our contradicting ways with nature have been challenged by thinkers like *Bruno Latour*. At the beginning of the coronavirus crisis, *Latour* wrote an article for AOC discussing the shocking improvement in our environment in such a short time from lockdowns beginning. He believes that we now have the opportunity to fight against bringing back our old climate regime. *Latour* recognises that the covid crisis

has revealed opportunities for everyone from environmentalists encouraging change to globalizers continuing to deny the importance of climate change. *“If everything is stopped, everything can be questioned, reversed, selected, sorted, interrupted for good or accelerated”* (Latour, 2020).

Jon Wyatt

Award winning photographer *Jon Wyatt* shoots contemporary documentary landscape projects showing the growing detachment of modern culture from our physical landscape. He addresses issues of earth science, ecosystem transition, conservation, and the ethics of land use and ownership through his imagery. (Wyatt, *Date unknown*)

Wyatt documented his own relationship with nature and his local environment through his practice. He found himself seeking sanctuary in local walking paths after a bereavement that altered his relationship with nature (Wyatt, *Date unknown*). His images, with sunlight puncturing through the trees, show the peacefulness and calmness of the places he was seeking solace.



Fig 1&2



Fig 3&4

Figures 1-4: Jon Wyatt. Sanctuary I. Dates Unknown

Nettie Edwards

Nettie Edwards creates anthotypes in her garden using images from her iPhone. Her digital images began an interest in historical photographic processes by considering how images could live beyond the phone screen.

“The Anthotype process strikes a deeply personal chord in those who encounter it. In response to this, much of my work explores themes of loss – of memory, sight, personal histories and identities, death, and extinction – animal, plant, natural resources, landscape” (Edwards, 2017)

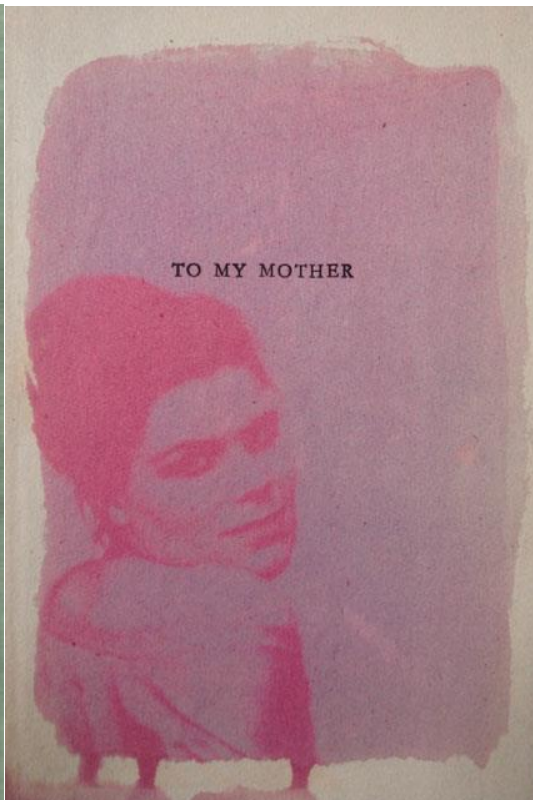
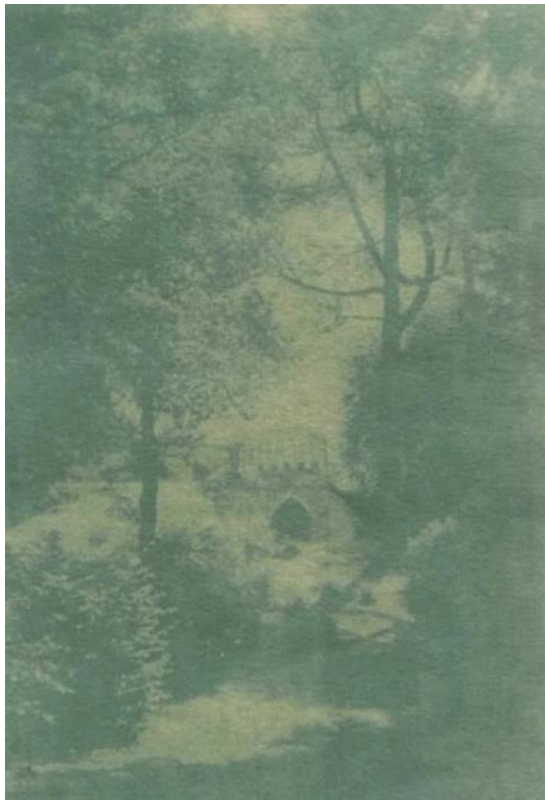


Fig 5&6



Fig 7&8

Figures 5-8: Nettie Edwards. Anthotypes, Dates Unknown.

Dineo Seshee Bopape

Bopape's installation work introduces elemental materials, found objects, archival images, video, and sound. Her work brings the celestial and earthly, the bodily and metaphysical, and the personal and collective together. Her body of work

produced for *Artes Mundi 9* exhibition connects African and US locations using clay and soil to create 1,000 drawings. Seven wall spaces exhibit these drawings in incomplete grids, one wall for each location. *Bopape's* work acts as a homage to Nder women who immolated themselves because they did not want to be taken as slaves. The mixed media installation questions what should be forgotten and what should be remembered. (*Artes Mundi*, 2021)



Fig 9



Fig 10



Fig 11

Figures 9-11: Dineo Seshee Bopape. Master Harmoniser, 2020

Practical Research

There are many environmental issues connected to using chemicals during darkroom processes. These will need to be considered when experimenting and producing prints. Therefore, I have done some research into processes I'd like to experiment with that do not require chemicals. Both anthotype and chlorophyll processes are chemical free methods.

The London Alternative Photography Collective have started a sustainable darkroom programme holding a series of talks, workshops, and training with the aim to expand skills and knowledge of an environmentally friendly darkroom practice. "The Sustainable Darkroom is committed to exploring sustainability and its nuances within the photographic ecosystem, to develop an industry-specific response to the global ecological crisis" (Fletcher, Carr, Cazenave & White, 2019-21).

Anthotype

The anthotype process makes it possible to print images using natural juice extracted from flower petals, fruit peels and plant pigments. Firstly, the emulsion is made by grinding, mashing, or mixing the plant using a pestle and mortar or mixer. The emulsion will need to be strained through a cotton rag or coffee filter to get rid of any lumps, diluters such as water or alcohol can be used if the plants are too dry. Sturdy paper that can hold the emulsion will need to be left out in the sun for a long period of time. Objects or positives placed on the material make the print as the rays of sun destroy the colour of the pigment on show, bleaching the print. Depending on the emulsion, some may only need a few hours developing time while others could need a few weeks, the strength of the sun will also influence the exposure time. Anthotype prints do not need to be rinsed or fixed meaning that no chemicals are used in its production. (Fabbri, 2021)



Figure 12: Malin Fabbri. (Left to right) Red oxeye daisy, Bellflower, Garden Lupin, Potato, and Tulip, 2008 & 2010

Chlorophyll

The chlorophyll process is similar to the anthotype process but allows printing directly onto the surface of leaves using small objects or positives. All that's needed for the chlorophyll process is sunlight water and leaves, creating stunningly delicate and beautiful prints. This process brings the nature into art but requires a lot of patience, trial and error, due to the leaf's delicacy. A method of fixing the images onto the leaves to prevent further bleaching and deterioration has brought challenges with many resorting to fixing finished prints in resin. To produce a successful chlorophyll print, using a broad, flat leaf is said to be easier, with a higher contrast positive to improve the overall clarity. The strength and position of sunlight will impact the time the print will need to be exposed for. (Pereira, 2010)



Figure 13: Binh Danh. Leaf3, Date Unknown

Figure 14: Ingrid Guyon. Chlorophyll research, 2018

Figure 15: 'stratski'. Date Unknown

Cyanotype

Although the cyanotype process uses a solution of iron compounds, it adopts nature and the environment into the process. A cyanotype solution is made up of potassium ferricyanide and ferric ammonium citrate mixed with water separately then

blended together in equal parts. The chemicals are painted onto the paper/material in a dimly lit area and left to dry in the dark. Sandwiching a negative or objects on top of the paper and exposing to UV light will create a beautiful, blue-toned print of silhouettes and interesting shapes. Once the print has been left to expose for the required time it needs to be processed by rinsing under cold water to remove any unexposed chemicals and bring out the bright blue colour (*Fabbri & Fabbri, 2010*). Despite the use of chemicals, I will consider and experiment with the cyanotype process due to the ease of incorporating physical objects.



Figure 16: 'botanopia', Date Unknown

Figure 17: James Baturin. Cyanotypes, 2020

Figure 18: James Baturin. Cyanotypes, 2020

In order to produce work to the highest possible standard, I will need to improve some skills and processes. Some areas I believe need enhancement would be darkroom processes and equipment, scanning, and film processing. I also hope to experiment with anthotypes, the chlorophyll process, lumen prints, and cyanotypes to allow me to bring the environment into my images.

As a starting point, I have collected visual observations of exploration around my local area. These images capture the characteristics of particular areas and my

personal attraction towards the nature within. I aim to revisit these places and explore new ones collecting as much research and materials as possible to expand and develop my ideas further.

Figures

Figures 1-4: Wyatt, J (Dates unknown) *Sanctuary I*. Available at:

<https://www.jonwyatt.co.uk/Projects/Sanctuary--I/33>

Figures 5-8: Edwards, N (Dates unknown) *Anthotypes*. Available at:

<http://www.alternativephotography.com/nettie-edwards/>

Figures 9-11: Bopape, D. S (2020) *Master Harmoniser* (detail) [Drawings, clay and soil on watercolour paper] Available at:

<https://artesmundi.org/dineo-seshee-bopape/>

Figure 12: Fabbri, M (2008 & 2010) *(Left to right) Red oxeye daisy, Bellflower, Garden Lupin, Potato, and Tulip*. [Anthotype photograms] Available at:

<https://www.alternativephotography.com/anthotypes-anthotype-process/>

Figure 13: Danh, B (Date unknown) *Leaf3*. Available at:

<https://petapixel.com/2011/08/30/photographer-makes-chlorophyll-prints-using-leaves-and-sunlight/>

Figure 14: Guyon, I (2018) *Chlorophyll research*. Available at:

<http://www.ingridguyon.com/blog/2019/1/10/chlorophyll-printing-research>

Figure 15: 'stratski' (Date unknown) Available at:

<https://www.lomography.com/magazine/315395-alternative-processes-chlorophyll-process>

Figure 16: 'botanopia' (Date Unknown) Available at: <https://botanopia.com/shop/gift-boxes-and-kits/cyanotype-kit-diy-kit-to-create-your-own-gorgeous-prints/>

Figure 17: Baturin, J (2020) *Cyanotypes*. Available at: <https://shootitwithfilm.com/wp-content/uploads/2020/04/How-to-Make-Cyanotype-Prints-by-James-Baturin-on-Shoot-It-With-Film-10-300x296.jpg>

Figure 18: Baturin, J (2020) *Cyanotypes*. Available at:

<https://shootitwithfilm.com/how-to-make-cyanotype-prints/>

Bibliography

Terramai (2018) *Understanding the Biophilia Hypothesis*, Terramai. Available at:

<https://www.terramai.com/blog/understanding-biophilia-hypothesis/#:~:text=The%20biophilia%20hypothesis%20is%20the,book%20Biophilia%20published%20in%201984.> (Accessed on: 13/5/21)

Wilson E. O. (1984) *Biophilia*, Harvard University Press.

Fletcher, H & Carr, E & Cazenave, A & White, E (2019-21) *The Sustainable Darkroom- Manifesto*, London Alternative Photography Collective. Available at: <http://www.londonaltphoto.com/manifesto> (Accessed on: 14/5/21)

Elwes, C (2016) *Review Articles: Decolonizing Nature: Contemporary Art and the Politics of Ecology*, T.J. Demos, Moving Image Review & Art Journal, Volume 7, Number 1. (Accessed on: 13/5/21)

Latour, B (2020) *Imagine barrier gestures against the return to pre-crisis production*, AOC. Available at: <https://aoc.media/opinion/2020/03/29/imaginer-les-gestes-barrieres-contre-le-retour-a-la-production-davant-crise/> (Accessed on 17/5/21)

Fabbri, M (2021) *Anthotypes- instructions to making a print using plants*, Alternative Photography. Available at: <https://www.alternativephotography.com/anthotypes-anthotype-process/> (Accessed on: 14/5/21)

Pereira, T (2010) *The chlorophyll process*, Alternative Photography. Available at: <https://www.alternativephotography.com/the-chlorophyll-process/> (Accessed on: 14/5/21)

Wyatt, J (Date unknown) *Jon Wyatt, Bio*. Available at: <https://www.jonwyatt.co.uk/Info/Bio/1> (Accessed on: 13/5/21)

Wyatt, J (Date Unknown) *Jon Wyatt, Projects, Sanctuary I*. Available at: <https://www.jonwyatt.co.uk/Projects/Sanctuary--I/1> (Accessed on: 13/5/21)

Edwards, N (2017) *Nettie Edwards*, Alternative Photography. Available at: <http://www.alternativephotography.com/nettie-edwards/> (Accessed on: 17/5/21)

Artes Mundi (2021) *Dineo Seshee Bopape*, Artes Mundi. Available at: <https://artesmundi.org/dineo-seshee-bopape/> (Accessed on: 15/5/21)