

Summary Sentence or Research Question:

Changing Our Perception of Waste: The Hidden Value on Brighton Beach

Summary Statement:

Starting with the global Ocean Pollution issue, I researched the topic and narrowed down my research site to Brighton beach after personally seeing the horrific results of human activity on the beach with people irresponsibly leaving bags of rubbish.

Before I could start designing anything, I had to research what waste streams were produced along the seafront from places such as shops and restaurants. I did this by doing beach cleans as well as researching into these shops to find out what types of rubbish they produced and what they were selling. I knew there was a big problem with plastic rubbish on the beach, but what surprised me was how little the restaurants compost their food. From this I knew that I had to include this into my project, so I began looking into how I could use food waste as a resource. This led to experimenting with what I could do with the food waste and different ways of making it into a material. The most successful materials that I made during this experimentation period were:

- Using the apple leather technique to make a biodegradable material out of lemon peel, which are a waste product from seafood restaurants.
- Mixing mussel shells with bio resin.

Meanwhile, for the other part of my project, I was developing ways to use the rubbish that I collected from the beach. These mostly included melting plastic down and discovering the different melting point and how they perform.

The designs for my products were then developed from patterns and forms found along my research site, Brighton Beach.

The aim for this project is to show people that 'waste' is a resource, and by turning it into products, I hope to bring out the value in the materials.

Key Words:

Plastic Pollution, Waste Streams, Circular Economy, Material Exploration, Sustainable Design, Product Design.

Research Methods:

Visual Research – Videos (documentaries), Going to the beach and collecting/observing what gets washed up and left behind by people who use the beach (By visiting the beach on a daily basis), photography.

Contextual Research – Circular economy research (refer to dissertation research), Psychology behind consumerism (what do people perceive as ‘Valuable’) and the need to always buy something new.

Importance of the oceans, how the debris and harmful chemicals affect the oceans and ecosystems, human behaviors to do with value and user behaviors.

Theoretical/Historical/Contemporary References – Look at different designers/makers that are using sustainable materials (e.g. Pinatex who use pineapple leaves to make ‘leather’).

Market / Commercial Research – Examples of solutions where companies have taken the circular economy on board (refer to dissertation research).

Companies/organizations/projects in Brighton: A drop in the Ocean, beach cleans, Fair shop,

Issue / Social / Cultural Initiated Research – Through contextual research, getting a good understanding of why the oceans are at threat and how it will impact the rest of the world. How can design play a part in the solutions of the problem?

Medium for Research: Photography, drawing, models, 3D Drawing using Rhino, collection from beaches, articles/books/documentaries, experimentation with materials (recycling, reusing, biodegradability), videos.

Material and Technical Investigation:

Material experimentation and development–

Experimenting with how I can use ‘rubbish’ as a resource. (eg melting plastic into a sheet to then use to make a product)

Experimenting with food waste to make it into materials.

Prototypes, models, Digital 3D models using Rhino.

Timescale of work across the year:

September to December: Research about your topic and material experimentation.

December to February: Development of Designs

February to May: Making product and problem solving.

May: Degree setup

Identify potential professional contexts for your work:

Interior decoration

3D Outcomes:

A collection of products:

Candle holder made from Mussel shells and Bio Resin.

Tiles made from Mussel shells and Bio Resin.

Light made from recycled plastic beach waste and gilding metal.

Plant pot made from plastic beach waste

Food serving dish made from plastic beach waste

Presentation & Display:



Portfolio / Publication:

Ethical considerations - If you answer YES to any of these questions then email Patrick IMMEDIATELY

Will you be asking anyone questions (interviews and or questionnaires)? No

Will you ask people to test or physically evaluate your work for you? No

Do you intend to run a workshop that involves a group of people? No

Do you intend photographing, videoing or sound recording anyone? No

Does your work involve children? No

Brief outline of ethical considerations:

N/A

BA(hons) Dissertation Title / MDes Essay Titles:

How Design Contributes to The Circular Economy: Examining the Initial Design Process.