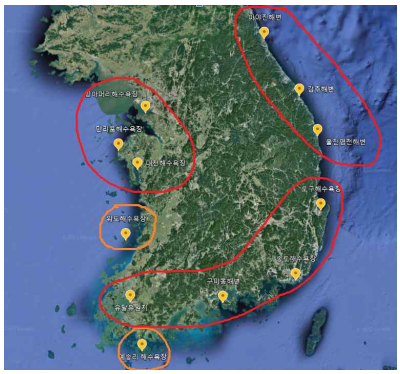
Consultation Request Paper

Title	Requesting advice on our current research methodology and location selection criteria		
Date Created	June 30, 2022	Author	Syemin Park
Research Purpose	To create a (GPS, Image, 3D Model) dataset for our artwork, 'Plastic Sarira'		
Summary	Dataset Creation Process: Collecting, categorizing and 3D scanning waste plastics found along the shores of South Korea. Artwork Summary: Inspired by the 'plastisphere', a community of microbes growing as a thin layer of life (a biofilm) on the outside of plastic, our artwork simulates a virtual ecosystem that evolves and co-exists with microplastics.		

1. Research Plan

1-1) Location Selection Criteria 1st Option

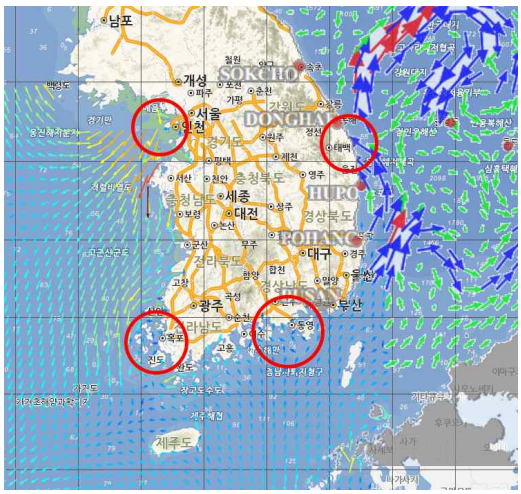
⇒Select regularly separated beaches to collect plastics from diverse environments



Area	Beach Name	Count
East Sea	Ayajin Beach Gamchu Beach YeomJeon Beach	3
South Sea	Dogu Beach Songdo Beach (Pohang) Gumi-dong Beach Yudal Recreation Area	4
West Sea	Bangameori Beach Manlipo Beach Daecheon Beach	3
Island	Wido Beach Yesongri Beach	2

1-2) Location Selection Criteria 2nd Option

⇒ Select shores that are geologically prone to store sediments due to tidal currents.



Area	Beach Name	Count
East Sea	Imwon Beach	1
South Sea	Geumgap Beach Songdo Beach (Busan)	2
West Sea	Daebudo Mud Flat	1
Island	Mangchi Mongdol Beach	1

2) Equipments

- Vinyl Bag, Pincers, Gloves, Label Paper, Markers, Tape, Camera, Tapeline

3) Research Methodology

Category	Content
Research Scope	10m×10m from the coastline
Research Duration	1~2 hours
Collection Criteria	Plastic Type: Resin Fillet, hard plastic, film, fiber, Styrofoam, etc. Contamination: Collect all regardless of contamination degree Size: Min - 5mm, Max Diameter -180mm, Max Height- 250mm (The min/max size our 3D Scanner supports)
Storage	Store plastics found from each beach in one vinyl bag, wash them, then store each plastic in individual zip-locks (biodegradable).

2. Consultation

* Requesting advice on the following

1. Which location selection criteria is more appropriate?

- In the first plan, we were ignorant of the geographical characteristics of each beach, so we simply used relative distance as the main criteria. In the second plan, we tried to refer to the flow of the current, but this does not promise that more waste plastics have been washed ashore. Is there any other criteria better suited to select beaches where we can collect more diverse plastic shapes and sizes?

2 The most recent paper on statistical nationwide beach research for plastics was written in 2015. We could not find any information about beach waste even in the 'Korea Environment Corporation Waste Statistics'. Do you know any source or site where we can find recent data on waste plastics per beach?

3. How can be properly dispose the waste plastics we collected?

- We assume that plastics that have been polluted, corroded to a large extent cannot be recycled. Are there any other procedures required to correctly dispose these types of plastic waste?

Thank you for your time.