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Preface

This paper is structured as an album – drawing inspiration from the collective but different sunbisoro haenyeos produce as they surface the water. The interludes, like in an album are independent and a reflection of all the chapters, reflecting the abrupt moods - that were experienced during the research, that better defines the research experience than they would have in a particular section.

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List of Glossary

Bitchang	– a metal tool used to catch abalone
Buldteok	– A place made of stones/ wood/ bricks near the shore haenyeos work at, to change their clothes, keep them warm, and gather in
Haenams	– name of the male divers working in Jeju Island
Haenyeos	– name of the female divers working in Jeju Island
Hangun	– a term used to identify haenyeo at beginner phase of knowing skills and knowledge of the sea.
Junggun	– term used to identify haenyeos at middle phase of knowing skills and knowledge of the sea.
Kakuri	– knife used to poke and catch urchins
Muljil	– term used to explain the process of: swimming, diving, and catching the sea harvest

Sumbisori – refers to the sound that haenyeos make when they surface the water after diving and being in the water for 2-3 minutes

Sunggun – a term used to identify haenyeo at an advanced phase of knowing skills and knowledge of the sea

Taewak – a tool consisting of a flotation device and a net attached to it, to carry in the water and collect the harvest in by the haenyeos

List of Acronyms

FAO	Food and Agriculture Organization
FPE	Feminist Political Ecology
GIAHS	Globally Important Agricultural Heritage System
PE	Political Ecology
UNESCO	United Nations Development Programme

Abstract

This study seeks to elucidate how development in Jeju Island is transforming inter-generational knowledge transmission and livelihood for *haenyeos*. Using tools of ethnographic research, participatory observation, semi- and un-structured interviews, transect walks, and focus group the research aims to understand the role development in three ways.

First, by analyzing how the environmental knowledge is transmitted inter-generationally to identify the gaps. Secondly, diachronically looking at the political and economic institutions and processes that shape and expand those gaps further politicizing (re)production. To subsequently, understand what narratives are taking root diverging from the needed embodied and more-than human relationships that shapes the seascape.

The research has led to discover the embodied – care, emotional, and mutually respected relations between the older *haenyeos* and their work is partially realized, known, and experienced by the younger *haenyeos*. Scalar analysis of the diachronic shifts in political and economic processes undergoing on the island reveal the expansionist agenda and narrative that hinders the reproduction of *haenyeos* and their seascape.

Thus, suggesting alignment of strategies between generations by sharing knowledge that sheds light on the current material realities of *haenyeos* to demand the multispecies justice needed.

Relevance to Development Studies

This topic is relevant to Development Studies insofar as *haenyeos* although recognized by the state and UNESCO (2016), the community and the species in the sea continues to see a decline in its population. Failure of the states' strategies materializing in the subverting identities of the new generation needs to be elucidated on by examination of how development processes, goals, and narratives embed and construe the reproduction of the social group and their ecology. With the recognized importance of *haenyeos* history and their work through turbulent colonial times and cultivation of sites (by institutional processes) to preserve their knowledge, this research attempts to contribute the continuation of *haenyeos* reproduction by exploring and analyzing the causal mechanisms of the gaps presently persisting in ongoing strategies.

Keywords

Seascape; Haenyeos; Inter-generation; Knowledge Gaps; Collective Remembering; Politicization; Participatory Observations

Chapter 1 *Haenyeos* – Making Sea their Home

AN INTRODUCTION

Yu Kyong and I drive down to the shore at 5 a.m., when she says; “the waves look harsh today”, depicting an unpredictable environment that *haenyeos* tackle every day as they wait 2-3 hours at the *buldteok* to start working (Appendix I). We are the first to reach the *buldteok* and get ready to turn around, but suddenly, two additional groups of *haenyeos* arrive in carpools. They all look at me expectantly, leading Yu Kyong to introduce me and explain my research purposes, hence asking them if it’s okay I join too. The women give their consent by continuing to discuss whether they should go in the waters today.

It’s decided that they will wait for the tides to reside and head to *buldteok* to sit in their spots reserved with their belongings. The space fills with a cacophony of voices in the next minute, discussing body pains, house issues, personal relations, routines, and life’s worries. Sometimes in between, they see Yu Kyong and I conversing and would be interested in joining the conversation and answer some questions. Once the waves resided down, the *haenyeos* change into their swimming gears while helping each other and start marching along the shoreline. The youngest *haenyeos* go last, turning off everything in the *buldteok* and making sure all *haenyeos* have left, also walking behind in case anyone needs something or stops for other issues.

Without waiting for each other they start diving into the water, their competitive spirit taking life. They swim 200m into the sea before they dive into the waters to start harvesting the urchins. As I see their yellow fins and orange *taewaks* in the air above the surface, I start voice recording my first observation from the shore~~



Figure 1: Haenyeos fins and taewaks seen above the surface (Source: Author)

1.1. Background

Haenyeos, the ‘sea-women’ of Jeju Island, in South Korea have travelled miles to pursue their sea harvest work since the 17th century by symbolically embodying the island in their work. They are known as “*jomyeo, jomsu, hamsu*” in other countries¹ where they travelled and worked.

¹ Russia, Japan, Mainland Korea, and China (*Haenyeo* Museum, 2018).

Harvesting is done in 100-300m depths in the sea without any breathing equipment to catch urchin, octopus, abalone, seaweed, agar, turban shells, sea cucumber, conches, etc., using hands, *kakuri*, spike, *bitchang* (Haenyeo Museum, 2018). Jeju – the island and the sea are seen as an embodiment of Goddess *Seolmundae* by the islanders, the volcanic mountains seen as breasts and small female deities residing in small hills (See, 2019). Each element on the island: wind, soil, hills, water are perceived as Goddesses that need to be cared for (Haenyeo Museum, 2021). Hence, *haenyeos* go to harvest these species following a harvest calendar they produce and reproduce every year according to the lunar calendar.

Earlier *haenyeos* who had limited options of work started *muljil* from an early age developing a ‘way of life’ that continues till today. Older *haenyeos* began to dive and swim since the age of 8-9 y/o and joined their village *haenyeo* group usually at 13-15 y/o without a retirement age (Jeju Special Self-governing Province, 2019). They rank themselves as respectively; baby *haenyeo*, *hangun*, *junggun*, *sanggun*, and divide the work in deep waters depending on these ranks. *Muljil* is not just work but a ‘way of life’ (Witt et al., 2003 as cited in Berkes, 2017) where the women come together almost every morning for years to gather as a family, get ready for work, and harvest which becomes more valuable than even the sale of their produce. Such a way of knowing and living is impossible to let go of, for the women, thus they keep coming back to the ocean.

The traditional ways of work, diving gear and medium of knowledge transmission has changed over the years. Traditionally, the gear initially involved three pieces: pants (*mulsojunggi*), a jacket (*muljeoksam*), and tying hair pieces (*muljugun*), which were all composed of cotton, to minimize the water resistance. The jacket also included sides tied with strings for women to expand the size of the gear when needed, i.e. during pregnancy. In the 1960s, the rubber suits replaced the cotton clothes, 10 years later it had already been distributed to all (Haenyeo Museum, 2021). Knowledge about the species and their ecological cycles is passed to the future generation of *haenyeos* to understand the importance of adhering to the harvest schedule (Appendix III). The harvest calendar, based upon the lunar calendar, is rendered accessible to the *haenyeos* via digital form in their phones, while other forms of it exist in the museum, with information pamphlets and books also used for the empirical purposes as secondary data in this paper.

Maintenance of the traditional methods of harvesting is uniquely preserved as *haenyeos* continue to harvest the sea still without utilizing any breathing equipment, to refrain any potential of over-harvesting the sea. Such thinking is aligned with the belief that the *haenyeos* take from the sea what is naturally given and taken in the exchange without anyone having an advantage. Every *haenyeo/haenam* in conversation reiterated to not “*be greedy in the sea*”, a central learning for them and, to only take what was given to you by the sea as “many things under the sea are stronger than we are” (See, 2019: 27). When discussing the everyday life of a *haenyeo*, the embodied experience (Sultana, 2021) extends from their own body to their community, to the species, till their harvesting grounds. Hence, both the material surroundings and the ideational capacities of value and belief systems *haenyeos* possess and reproduce ought to be seen as an emerging and embedding force.

The social group cares² for the island as an internal part of its ecology shaping their livelihoods and identity. *Haenyeos* have long held traditions of keeping the seascape clean, clearing shorelines, protecting it also from toxic waste and removing invasive species, while accessing healthy food (Rocheleau et al., 2015). Moreover, there are months where the harvesting

² Cares - Harcourt and Bauhardt (2018) forms of care is perceived here through: commoning, community, non-human beings, and in extending reciprocity to multi-species forming more-than human relations.

completely stops and *haenyeos* must rely on alternative sources of income following pluriactivity³. Pluriactivity is common amongst both the young and older *haenyeos*, where the latter work as farmers, shop owners, work the *haenyeo*-run restaurants, etc. especially during their off season. It is a practice that has continued for generations, becoming a part of *haenyeos*' identity.

This paper will expand on González-Hidalgo and Zografos' (2019) identity (discussed later) by adding another dimension of context, when observed in a diachronic depiction, in order to reflect upon how the collective memory of the social group evolves as an open system (Liu and Khan, 2021) (discussed ahead) through the three political events elaborated on next. These events will help contextualize the diachronically conditioned environment of *haenyeos* and how their lives and knowledge have transgressed over the years until recently. This will enable in turn to both undertake a synchronic enactment linked and added to a diachronic understanding of their identity.

1.1.1. Confucianism

Initially harvesting in the sea was not a choice, but rather a necessity for grand groups of women within Jeju. Earlier in 1909, when Japan decided to annex Korea, Jeju became an easy route to access the peninsula (See, 2019). See's (2019) book *The Island of the Sea Women*, observes Confucianism as an ideology practised and brought into Jeju from the mainland was very different for *haenyeos* who led the household financially. Confucianism idealised the conduct of life as built upon five main relationships: between a ruler and a minister, a father and a son, a husband, and a wife, the older and the younger, a brother and a friend (Baumann et al., 2019). In each correlation, the junior owes a strong sense of duty, respect, and service to the senior and the senior takes the responsibility of the former. Every relationship in Jeju also conformed to these values, especially between older *sanggun* and *hanguns*, later specified via participatory observation techniques.

Works of Confucius (Dawson, 1915) touched various religions, where his political ideologies were seen as fundamental to society and followed by every ruling regime. Confucius dictated qualities to become a "superior man" that were deemed as the highest way of living compared to any other practice. Korea is among the East Asian countries that has been influenced by Confucianism. Under the rule of the Yi dynasty (1392-1910) neo-Confucianism was dictated officially in the state (Chang E.Y., 2015 as cited in Preston, 2018).

1.1.2. April 3rd, 1948

During the years 1909 – 1945, Korea was colonized by the Japanese and later controlled by the USA, making Jeju Island a strategic channel to access the mainland (Special Committee, 2003). When the country was getting ready to unify the mainland and hold elections, the colonizing powers were still shifting on the Island from Japan to America. Thus, the US military and their supported Governor held anti-communist crackdown from April 1948 that lasted till 1954 (See, 2019; Special Committee, 2003). With the media and electoral control commanded by Governor Yoo, as described by See (2019) in her book, it limited the access to information about the mainland for the islanders. The movement led in Jeju was wrongly labelled 'red', but the uprising only held the demand that just and fair national elections take place without USA and its paramilitary influence (See, 2019; Eperjesi, 2023). Movements organized on a large scale over the years had influenced the islanders to march for their freedom and to vote.

³ Pluriactivity – when more than one job is taken up by people to manage and sustain their livelihoods (White, 2020)



Figure 2: Inmates waiting in line to be interrogated, November 1948.

(Source: US National Archive and Records Administration, as cited in Special Committee, 2003)

When news started travelling about protests happening in the mainland, *haenyeos* also organised themselves and became crucial for the economy after the events of April 3rd. *Haenyeos* were the first to initiate an anti-Japanese movement in January 1932 in *Gujwa-myeon*, *Seongsan-myeon*, and *Udo-myeon* to oppose the colonizers agenda of seizing Koreans property and discrimination (Haenyeo Museum, 2018). However, following the brutal killings of Aril 3rd, the islanders were told to live within 5km radius of the sea and the US army blocked roads to voting stations to contain the rebels “*in the end, no votes were counted from Jeju*” (See, 2019: 183; Kim, 2023; Park, 2018). Crackdowns had led to the influx of inlanders towards the coastal villages population for both shelter and food while *haenyeo* activities were banned. The end of the crackdown meant lifting of the ban of *muljil* which put *haenyeos* in an important position where they helped revive the economy after the death of 1/3rd of the population (Kim, 2023; See, 2019).

1.1.3. UNESCO 2016 title

The expansion of development on the island meant an increase in job opportunities and options, which has generationally been opted by *haenyeo* mothers for their children (See, 2019; Interview 1, 2023). Capitalist strategies of infrastructure development by the Jeju Special Self-Governing Province, known as *Saemaul Udong*, led to sudden decline in *haenyeos* population from 1960s-70s from 24,269 to 14,143 (Dronjić, 2021). With the ageing population of *haenyeos* increasing, *Haenyeo* Association decided to get the community in the Representative List of the Intangible Cultural Heritage of Humanity Intangible Cultural (UNESCO). With efforts of the department seen in their publishing work, museum set-up, and continuing traditional festivities the title was given to the group in 2016 (UNESCO, 2016).

Haenyeos being titled and associated with the UN has brought an important recognition for the group outside Jeju. This has contributed to the change in identity of *haenyeos* in the island where vocational schools are set-up for the new generation to learn (Song, 2020; Dronjić, 2021). Despite these advances in recognizing them, the women face the extinction of their own community that will be discussed next to portray the relevance of this paper.

1.2. Research Problem

Haenyeos have increasingly seen both a decline in numbers and an ageing population, as the younger generation have almost disappeared by moving into the cities and making alternative livelihood choices (Byun et al., 2015). A steep decline in *haenyeos* population was observed from the mid-20th century with numbers decreasing from 50,000 to 20,000 in the 1970s, presently standing at 3,200 in the whole Jeju Island (Rajan, 2022). Sea produce has also been limited in the oceans due to the changed ecology of the area with climate change causing rising sea temperatures and pollution in the ocean (Song, 2020). Generationally, the working population of *haenyeos* is also ageing, as of 2018, 95% were over their 50s and generally since the 2000s the younger women had declined in numbers (Jeju Special Self-governing Province, 2019).

Increases in average sea surface temperature in Jeju has been predicted to impact the island, with both summer typhoons and declines in species population. Climate change has a large impact on communities residing in Jeju near coastlines as it is warmer compared to the rest of the country due to its southern location (CMCC, 2020). Temperature is projected to rise to 5°C by 2100 which plays a big factor in marine life's metabolism, in which ecological cycles of organisms are maintained. With the increase in temperature, these ecological cycles are disrupted, creating pressure on fish catch potential for the *haenyeos* (CMCC, 2020; Song, 2020). In recent years, tropical typhoons have also been commonly making landfall in Korea which is causing the sea levels to rise (CIMSS, 2023).

Sea resources are important to the island, especially to *haenyeos* dependent on them, due to Jeju's infertile land and other climatic changes that have manifested in different ways. Jeju being a volcanic island facing harsh winds and temperatures all year around, is termed as *badtam*, defining an agricultural system to sustain in the island's "sandy volcanic ash soil" (FAO, 2014). *Haenyeos* with both lack of large arable land, colonial history, and lack of skills to pursue alternative jobs are mostly dependent on *muljil* to sustain their livelihoods. As development takes roots in *haenyeos* life and their ecology, it becomes important to analyze how the ageing populations' livelihoods will be impacted, and intergenerational knowledge transmission will occur without a generation to follow.

1.3. Research Objectives and Questions

How is development changing the inter-generational knowledge transmission and (re)production of *haenyeos* in Jeju Island?

Sub-research questions –

1. How is inter-generational knowledge transmission taking place in different sites?
2. How do village cooperatives and institutional processes politicize the (re)production of *haenyeos* and their knowledge?
3. How do the changes induced by development shape the future of *haenyeos*?

Chapter 2 Conceptualizing the Waves and their Knowledge

2.1 Literature Review

Until now contributions have been made on the work of *haenyeos* that reflect their history, conditions of work, and state's strategies to preserve the practice. Kwon's (2020) work highlights the role of *Haenyeo* Museum in representing *haenyeos* history and importance contributing to the feminist discourse in South Korea. The work emphasizes on the shamanist rituals, folk songs, and festivals celebrated by the women to praise the sea gods. Decreasing number of women divers is also problematized by Kwon (2020) who sees diversification of income sources on the island as the reason. The Museum is perceived as an important site of knowledge transmission for the future generation by the author as the shamanism culture dwindles and the community narrows on the island.

Similar work by Byun and others (2015) recognizes *buldteok* as an important space (site) for knowledge transmission focusing on how it has evolved over the years from being built by lava rocks to current use of concrete modernizing the construction. Spatial changes in the *buldteok* are analyzed with how the site is symbolic in sustaining the community's life, protect them from weather conditions, change clothes, train, and finally sort their harvest for sale (Byun et al., 2015). Other works have also comprehensively discussed the history and the work of *haenyeos* expanding to Japan, China, and Russia in the past (Koh, 2014).

Study done by Cheong (2010) discusses the "role of fishing village cooperatives in Korea" that was known as '*kye*' fishing community, transformed with the Japanese's colonial influence on fisheries management, and followed up with postcolonial cooperative systems ('*och*'). Initial system of *kye* worked as a voluntary communal work informally led by the local, introduction of fishing rights came in 1911 after Japanese occupation founded the fishing cooperatives. Post-colonial fisheries management aimed for "democratization and collective operation of fishing" (Chloe, 2000 cited in Cheong, 2010). Management of these cooperatives is done in a top-down process by the government that controls subsidies, regulations, and establishes the grounds to identify an insider and outsider (Cheong, 2010).

Contribution of Song (2020) delves into *haenyeos* harvest system using Food Agricultural Organization's (FAO) – Globally Important Agricultural Heritage System (GIAHS). GIAHS five main values: food and livelihood security; agro-biodiversity; local and traditional knowledge systems; cultures, value systems, and social organizations; and landscape and seascape features are used to semantically analyze the socio-cultural codes (Song, 2020). The paper goes on to problematize the recorded decrease in species population of Jeju over the years 2012-17 and how *haenyeos* dependent on *muljil* not knowing any other skill were too old to find an alternative source of income. Following the descriptions of how *haenyeo* community works in and outside the sea within the categories of GIAHS, Song (2020) concludes the unpredictability for *haenyeos* future but recognizes Jeju's Governing Province effort to align GIAHS values with value-system of *haenyeos* is an effort to continue Jeju *haenyeos* sustainable fisheries system.

This paper also uses the Lisa See' (2019) book '*The Island of Sea Women*' to mainly draw the narrative of the *haenyeos* through her ethnographic account for the research of the story. The story revolves around Young-Sook and Mi-Ja, 2 *haenyeos* against the background of Japanese occupation and transition to America's control to make Korea independent. Narration of Young-Sook tells how they grew up on the coasts, travelled around the island and to other countries to earn better incomes to support their families. Following the political changes

the book also graphically demonstrates the events of 4.3 that impacted not just the *haenyeos* but islanders for generations aligning with other researchers conducted on the incident (Preston, 2017; Eperjesi, 2023; Kim, 2023) Most recent work of Dronjić (2021) intensively discussed the role of UNESCO in safeguarding the *haenyeo* heritage, pointing at the declining population that resorts to using the influx of tourists to sustain their incomes as the ecosystem fails to do.

This paper mainly uses the general information, facts, and data from Song (2020), Kwon (2020), Byun (et al., 2015), and Cheong (2010) to triangulate data gathered in the field and found in secondary sources. While See (2019) and Dronjić (2021) work is also used to build relevant arguments.

2.2 Theoretical Framework

Focusing on the empirical data collected, the paper starts its analysis using Feminist Political Ecology (FPE) framework, built off from Political Ecology (PE). Rocheleau and Nirmal (2015) describe FPE using a post-structuralist position in how it provides the rightful recognition of the until now ignored role of women's knowledge, skills, emotional, and care ecology (discussed ahead). The 1990's saw the shift of decentring gender making it a category of its own to be worked on (Radcliffe, 2006 as cited in Elmhirst, 2015).

Following the work on environmental impact, Rocheleau and Nirmal (2015) highlighted the unequal impact and distribution of damages caused both mentally and physically on women. Similarly, recognized by Elmhirst (2015) who explains how FPE framework helps draw attention to the gender dimension amidst the scalar debates of how power is exercised within political and economic processes in the neoliberal age. Using the post-structuralist standpoint in FPE Elmhirst (2015) argues the impact on gendered processes taking place within the neoliberal world further aiming to expand accumulation of capital by dispossessing rightful land/sea owners. This area has further been largely influenced by the contribution of geography as a sub-discipline within PE (Elmhirst, 2011) that built on the challenges feminist research faced by placing the destabilised role of gender at the heart of debates.

New wave of FPE has thus explored the multi-dimensional subjectivities with intersectionality of "race, ethnicity, age, sexuality" (Nightingale, 2011) who saw the material manifestations of how gendered subjectivities take place in Nepal. Such acknowledgement of subjectivities has led to forthcoming contribution of how further expansion of accumulation by commodification has led to material impact to the social reproduction of the people and landscape (Rocheleau and Nirmal, 2015). Built on by the latest development in FPE by Sultana's (2021) work that offers to pluralize epistemologies to better problematize the centres and margins of PE.

By building on these arguments of FPE and taking the "work in process" forward in this research, this paper goes onto contribute to an acknowledged limitation in FPE's epistemological dependence on subjectively constructed knowledge and knowledge producers missing the scalar analysis of the political-economic spheres the knowledge-producers are embedded in.

This limitation is addressed by Al-Hindi's method of analysing the material manifestations of political and economic processes suggested by conscious recursivity that "incorporates and accounts for the material realities of women's lives" (1997). Though "transparent reflexivity" is criticized by Rose (1997) when explaining Larner's (1995 as cited in Rose, 1997) use of 'place' and knowledge produced there, finding the reflexivity to produce "assumptions about agency and context". However, this paper argues using both ways in which Rose (1997) maps the reflexive landscape: "as a relationship of difference, articulated through an

objectifying distance” and “as a relationship of sameness, understood as the researcher and researched being in the same position”.

The latter is demonstrated through how both the new generation of *haenyeos* in Jeju, and the researcher are ‘outsiders’ to Jeju. Simultaneously, the relationship of distance is present in how the new generation reflexively understands older *haenyeos* through “collective remembering” (forthcoming) - analyzed objectively from researcher's reflexivity to better explore the context of both old and young *haenyeos*, and the narratives to reduce assumptions. Thus, the levels of abstraction is understood in a circular movement from abstract to concrete and vice versa to analyze the issue through both scalar and ground material realities (Al-Hindi, 1997).

Subsequently, problematizing the urgent crisis of (re)production of knowledge that materialises in the gaps of how both generations struggle to embody, care, and possess the skills of *muljil* within a seascape imbued with political and economic processes. Analysis is set against the diachronic events that have shaped the material realities and gendered geographies by Confucianism, events leading to April 3rd, 1948, and further following the impact after UNESCO’s recognition given in 2016.

2.2.1 “Way of life” and the Embodied

FPE allows for the analysis of *haenyeos* persistent practices in their work where more than-human⁴ relations manifest through care for the community, species, sea, and the island. Observations at the *buldteok* with the 18 *haenyeos* revealed the bodily experiences (Sultana, 2021) they go through due to the materiality of their work. Ingersoll’s (2016) book ‘Waves of Knowing’ is used as an underlying foundation to understand *haenyeos* work as an embodied experience through his way of exploring the alternative ways of knowing incorporated by Kanaka surfers in Hawaii. He uses seascape epistemology to allow culturally produced knowledge of the Kanakas using the ocean as a pathway of understanding the abused political-economic changes brought by powerful actors and institutions, differentiating it from dominant Western works. Nightingale (2011) additionally has discussed how bodies can be understood as an extension of the ecology of humans that are embodied through practices. Reflecting on these arguments the paper uses ‘seascape’ in this paper – to see the species and the sea as an extended part of *haenyeos* body, consequently the analysis of the epistemological implication of doing so will be discussed in the paper ahead.

Furthermore, the traditional environmental knowledge (TEK) transmission is understood through the work of Berkes (2017) who highlighted TEK importance by ascribing it “as a way of life”. Berkes acknowledges TEK as science to better understand, conserve, and transmitted through its analysis in 4 levels (seen in Figure 3). Empirical data gathered will be structured in the first and second levels of analysis using Berkes’s system below to theorise *haenyeos* work by building the argument using concepts of more-than-human, care, and emotional work ahead.

⁴ Signifies the efforts *haenyeos* make to reciprocatively use the sea and the species.

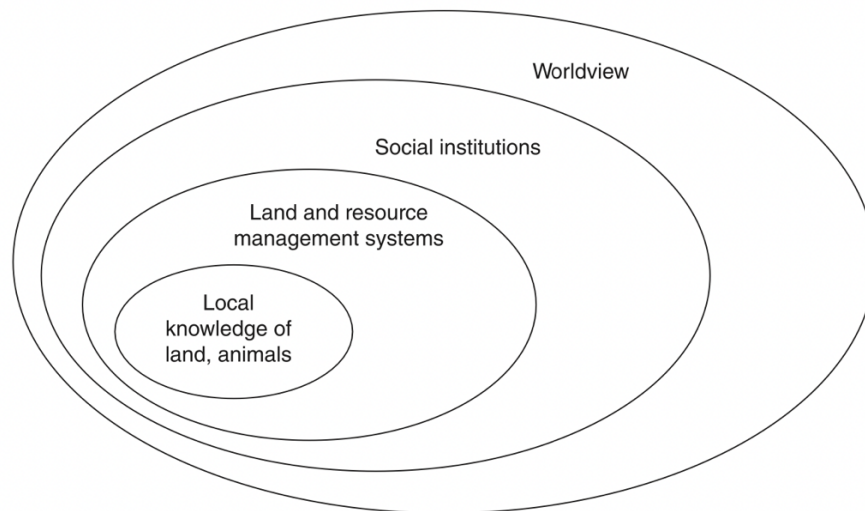


Figure 3: Levels of Analysis in Traditional Knowledge and Management Systems
 (Source: Berkes, 2017: 17)

Everyday knowledge lived, transmitted, and experienced is seen through Clemente and others (2019) emphasize on analysing the horizontal relations and connections shared by humans and environment. These take the form of care, emotive, and more-than human work that play out in “communing practices” of the community. Emotions are seen as an unavoidable overlapping and penetrable concept, analysed using the work of González-Hidalgo and Zografos (2019). They view emotions in both spatial manners of being expressed publicly or privately, that enhances the concept of identity (discussed later) in “personal-political, the geographical, more-than human, the psychological, and collective” and context (González-Hidalgo and Zografos, 2019).

Concept of ‘cares’ emphasising the plurality of ‘care’ work women are involved in is sketched in Domínguez-Domínguez-Guzmán and others (2022) analysis of ‘water care’ through observation of local specificities in Peru. They take cultural knowledge produced and shared in Peru seriously to develop forms of care seen and described as: “adaptive managerial style, vigilants, listening to water, and activism” (Domínguez-Guzmán et al., 2022).

Their work encouraged the analysis of different forms of care seen through the respect for *sangguns*, cooking food for each other, and communal relations (Clemente et al., 2019) maintained within the *baenyeos* emerging from 70+ years of work. The work of Clemente and others (2019) work is drawn for analysis due to her emphasis on scales and spaces recognizing how the local and global relations of human and environment are embedded and entangled, recognizing the need to develop a framework to examine political, economic, and more overly ecological issues.

Furthermore, more-than-human relations are emphasized using the reciprocity of respect and justice demanded for multispecies by Ojeda (et al, 2021), and Emel and Nirmal (2021) research on animal geographies. They argue that relational understanding of forging identities within the interacting pluriverse of human, non-human, and species calls for a multi-species justice. Emel and Nirmal (2021) locate animality and species centrally while accentuating the multi-dimensional understanding of contextual politics needed to analyze the causal and subsequent emerging consequences on the multi-species.

Within the data collected all the aforesaid forms of care relations were observed, told, and felt overlapping using ethnographic methodology (discussed in next section). The situated knowledge is thus, relationally emerging in forms of emotions (González-Hidalgo et al,

2019), care (Domínguez-Guzmán et al., 2019), more-than-human (Emel and Nirmal, 2021), and commoning (Clemente et al., 2019) practiced in the seascape of *haenyeos*, explored using Nightingale's (2011) work that helps build the argument for the next section.

2.2.2 Shifting Everyday Lives of *Haenyeos*

Nightingale's (2011) discussion on how subjectivities are constructed through material processes takes place in socio-natural networks that introduces emergence of material manifestations of nature-society. In her argument of subjectivity emerging in socio-nature, intersectional between the symbolic and the material manifestations – identities are produced within spaces that come with context (Nightingale, 2011). Thus, this paper utilises the term 'sites' to identify spaces that are diachronically understood and used primarily for inter-generational knowledge transmission. These sites of knowledge transmission require "equal emphasis on space and difference" (Harris, 2006 as cited in Nightingale, 2011). Therefore, the paper brings in the debates of Butler (1989), Liu and Khan (2021), and Rose (1997) to contextualise *haenyeos* using sites to better grasp the emerging identities within generations.

Conversation of sites continues as development changes and evolves the seascape and its boundaries with the newly established norms, institutions, and processes. Politicization of *haenyeos* as a social group has had implications on their livelihoods due to the transformation of the village cooperatives and 'control' of water boundaries (Ingersoll, 2016). 'Sites' in Guthman and Mansfield (2013) are introduced as important material forms that help analyse the political relations between species, power structures, and institutions. They also cite body as a site that can show material manifestation of embodied, care, and emotional work, realising it also as a socio-natural space (Nightingale, 2011) further developing identity of the *haenyeos*. Cindy Katz's (1992, cited in Rose, 1997) demand to reach conscious awareness of the situatedness of knowledge through reflexivity, additionally facilitating analysis of events and processes "in terms of the necessary and contingent relations" (Al-Hindi, 1997). Further work of feminist geographers recommends understanding of power relations through scales that can be linked by bridging the gaps as Nast (1994, cited in Rose, 1997) recommends with large-scale political and economic objectives to smaller-scale methodological strategies.

The research attempts to employ these methodologies using these suggestions to analyze the 'political' in FPE diachronically observed through the development processes evolving in Jeju. Specifically, methodologies are employed and utilised at 'sites' that are important spaces for knowledge transmission, analysing their subjectively constructed narratives through reflexivity, going on to impact the transmission.

Paulson and others (2003) work is used to recognize the political and economic processes that are embedded in the social relations of human ecology – leading to development of environmental crisis and crisis of social reproduction. Politics for him materially produces itself in "social relations of production, controlling resource use, on multiple scales, and infused with cultural knowledge and value" (Paulson et al., 2003). In the context of Jeju, work of Gibson (2008) is used to introduce village cooperatives realized in his work as alternative economies that remain more prevalently known and valued as "marginal economies". His work helps to unveil the "root causes and bottom lines that govern the phenomenal world" (Gibson, 2008) introducing scepticism in what is known, also used as a tool for reflexivity later in the paper.

To ground the paper within the debates of fisheries management work of Nunan (2010) on how mobility is an essential part of fisherfolk to navigate their livelihoods around the fluctuating environment shaped by political and economic forces is used to problematize boundaries within seascape. Further impact on the vulnerability of the fisherfolk is debated

by Nunan (2010) in the context of Lake Victoria as there remain risks of theft and the company they travel with. This research, however, only seeks to explore how mobility is problematized for the *haenyeos* with the development of institutional processes in Jeju's context.

Additionally, Montgomery and Vaughan (2018) discuss how the top-down approach struggles to manage fisheries systems in Kahana, a Hawaiian island. Accentuating the need to understand context, community leadership, and determine the community's capabilities in managing the coastal resources through formal and informal processes. Likewise, Lauer (2016) uses the dwelling concept built using Ingold's (2000 as cited in Lauer, 2016) work to look at the scalar activities taking place in Solomon Islands shaping the "experience and practical applications" in an emergent way, though relaying that prior social, political, economic forces do not exist but are built through interrelated processes.

Although not disregarding the interrelated-ness of the processes, this research also pays focus to the context that is present prior to the influx of the new generation that interrelates differently due to diverse identities they form through their own and the island's context. Subverting identities are hence developed by the new generation through socio-ecological changes as opposed to the older *haenyeos* sharing a collective memory.

Collective memory, a recently explored term, is realised as an "open system" through Liu and Khan (2021) work that requires a diachronic and synchronic analysis (Archer, 1995 as cited in Liu and Khan, 2021) of the political and economic processes taking place for the agents. Their work has additionally examined the collective remembering that is controlled by state, especially discussing the colonisation of Korea by Japan, a narrative contributed by "heterogeneity in collective memories" (Liu and Khan, 2021) that marginalises people's experiences. Further emphasising on addressing the impact of capitalism in society's political and economic spheres amidst the heterogenous and in some parts controlled, and institutionalised collective remembering.

Contributing to the debate, two modes of how collective memory is possessed in seascape is observed in Assman and Czaplicka (1995) work through the divide of cultural and communicative memory. Cultural memory being defined as distanced from every day and seen as fixed in the past but materially able to manifest in forms of rites and museums. Wertch (2008) further interprets "collective remembering" as a site of contestation citing Dudai's process that is usually narrated and controlled by elites and state authorities. The understanding of the context that is politically charged thus requires reflexivity in understanding whos' narrative it is to gain deeper comprehension of the agenda behind. Narrative implications on the social reproduction of *haenyeos* is thus better explored through the subverting identities of 'outsiders' and the implications of collective remembering.

Feminist critique of Ojeda (et al., 2022) has recognized debates of how political-economic processes and material conditions impact social and ecological reproduction by over-valuing production. Further they identify these processes to have "started with colonialism, rapidly globalised in the 21st century solidified by both neoliberal and progressive governments" (Ojeda et al., 2022). Using this critique, the paper will evaluate the development processes that have shaped the livelihoods intergenerationally in Jeju.

2.2.3 Emergence of Activism against Global Narrative of Development

Analyses of the narratives taking control in building identities for the new generation through collective remembering side-line the current issues in reproduction of the seascape and *haenyeos*. Hence, it becomes imperative to recognize the ground material realities of *haenyeos* to combat expansion goals by focusing on multispecies justice, vigilance, and activism (Ojeda et al., 2022; Domínguez-Guzmán et al., 2022).

Recognition of relational emergence of nature-society in Nightingale's (2011) work confirms how identities are not fixed, but interacting and emerging as a consequence to material changes in the seascape. She credits the geographers that brought the space to understand new manifestations of how subjectivities could be constructed in new ways introducing 'context' by Harris (2006, cited in Nightingale, 2011) to better understand social relations. Similarly, Rose (1997) argues that although using reflexivity to understand self and the context demands "universalizing certainty", she hopes for other possible ways to situate knowledge through "other kinds of reflexivity".

Building on these arguments the paper posits itself using collective memory i.e. the learnt and embodied experience within the spatial and temporal context reflecting in the new generations' way of learning, becoming, and experiencing *baenyeos* work. The paper explores the context of how different identities came to be using Al Hindi's (1997) work in Critical Realist FPE who argues critical engagement in feminism helps decipher "what is necessary and what is contingent in feminist standpoints". This different standpoint she adds enables a strong objectivity into the discussion of how feminists will act against the oppression that is contextually driven (Harding, 1991 cited in Al Hindi, 1997). Further supported in her task by Harding's (1991) "strong objectivity" positions the research findings from knowledgeable groups over the dominant discourses and projects.

By bringing the objective in the analysis through critical engagement with subverting identities and narratives controlling "collective remembering" analysis of the gaps and responses needed are discussed using Ojeda (et al., 2022), Nightingale (2010), Tsing (2005), and Rocheleau and Nirmal (2015). Tsing's work builds on how performance and large-scale development is a "gateway to expand capital accumulation" where scales are undefined and misused to build and work towards the homogenous idea of global development. Such macro-narratives are shaped by the political and economic forces that "propose, practice and evade" scales in their developmental goals further dispossessing and displacing communities. Addressing these scales of expansion using the (aforementioned) critical work of Al-Hindi (1997), Nightingale's (2013) fluid boundaries that contest with the external forces, the paper will then emphasise on presently contested lives of *baenyeos*. Therefore, a multi-dimensional need as recommended by Ojeda (et al., 2022) is used as an argument for multispecies justice in this paper to combat the crisis of (re)production of knowledge and communities in this paradoxical seascape.

2.3 Methodology and Methods

This paper seeks to employ ethnographic methodology using participatory observation, semi- and unstructured interviewing, transect walks, and focus group to conduct an inductive methodology⁵ to discover the emergent properties of the data not directly known. The research aims to understand the problem of declining population of *baenyeos* within the developing environment of Jeju Island through an inter-generational analysis of knowledge transmission and impact on livelihoods. To do so FPE framework sheds light on the contingent realities of the *baenyeos* crucial to grasp within the large-scale political and economic processes impacting those realities.

Al-Hindi (1997) suggests Critical Realism's retrodution method to build a conscious recursivity, that helps researchers develop an understanding to move from abstract to concrete and vice versa in a circular manner. To theorise feminist understanding of the political and economic processes grounding oneself in the material realities of the women is

⁵ Enforced by the inductive themes identified from the data to ground the theory making the analysis data driven (Bernard et al., 2017).

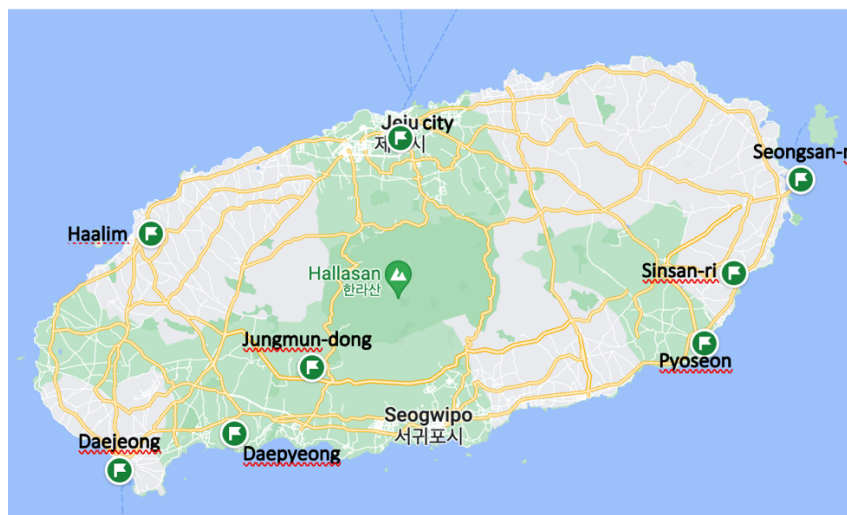
needed in such a circular manner. Reflection of this method is developed within the theoretical framework to incorporate those realities to make sense of women's lives by building on the epistemological analysis of FPE (Al-Hindi, 1997).

Feminists criticise 'transparent reflexivity' which alleges to affirm universal certainty when analytical uncertainty remains (Rose, 1997). Within this paper's research methodology, it nowhere asserts to have reached the objective and universal understanding of *haenyeos* but attempts to use tools of reflexivity and recursivity to fathom the inter-generational gaps. Sayer (1992 as cited in Al-Hindi, 1997) recommended the use of "semi-structured and in-depth interviews", that develops a more expansive knowledge than a survey questionnaire. McDowell's work in 'Doing Gender' (1992) coincided with these methods in addition to small scale participatory observation and ethnographic methods that feminist researchers have also recommended for a collaborative and participatory methodology to build interpersonal relations acknowledging the interactive process that leads to interpersonal relationship between the researcher and the women.

Role of reflexivity and recursivity was seen as crucial to look at the processes that have diachronically been shaping the present situation further contextualising the concrete realities of both the older and younger *haenyeos*. This was pursued as a goal during the research work by firstly, recognizing and diverging away from state's narratives that took control of *haenyeos* role and identity on the island, secondly, recognizing different aspirations between the old and younger *haenyeos* to better facilitate in-depth and semi-structured interviews. Lastly, the uncertainty and intangibility brought into the research with my positionality was conversed with the participants to seek a better collaboration in building knowledge.

2.3.1 Employment of Techniques

Ethnographic research involves the non-linear accumulation of data (Cerwonka, 2007) that was experienced through an 'unavoidable change' when the 'Khanoon' typhoon landed near Jeju leading to an early closure of the harvest period. Thus, ethnography streamlined as an improvisational practice allowing for critical observation of how weather extremities impact the daily lives of *haenyeos*. Data was collected from 7 fishing villages and the city centre in Jeju (Map 1) through primary participatory observation, recorded fieldnotes, unstructured and semi structured interviews (16) (Appendix I and II), and 1 focus group. Further, secondary data was acquired from *Haenyeo* Museum in both textual and visual forms, to aid in triangulation of information using works mentioned in literature review, and government and international organization documents.



Map 1: Fishing Villages visited in Jeju identified using green flags (Source: Google, 2023)

In Jeju I was in contact with a primary informant – Yu Kyong who helped gather TEK locally known and became my source to reach other interviewees and further the triangulating techniques (Berkes, 2017). Although the interviews initially started with the basic preliminary questions they were built on with probing questions, silent probe technique was employed during “glibness” (Bernard, 2017) as it was observed interviewees reflected and took their time to respond, a cultural nuance in South Korea. Moreover, baiting was applied for more politically sensitive questions around the issues of Fukushima nuclear plant’s water discharged in the sea and other growing protests to gather a more comprehensive understanding on the issues (Bernard, 2017).

Interviews were usually not recorded and were jotted as notes (later expanded) as the conversations with the interviewees took place while moving between different sites. Thus, time was devoted to write or record full field notes of observations and interviews by taking breaks from the knowledge hub⁶ (Emerson, 2011). Interviews 7 - 16 (Appendix III) were conducted with Jee Eun (translator) who helped transcribe the interviews in English. Furthermore, gathered data was analyzed using tacking technique (Geertz, 1973 as cited in Cerwonka, 2007) to firstly, analyze the empirical information collected, secondly, reflect using “reflex of reflexivity” (Kvale et al, 2009) by contextualizing the empirical through different angles of generation, collective remembering, and source of narratives to unravel the different layers of social and ecological reality of all *haenyeos*.

Subsequently, participatory observations were conducted at different sites: museum, Hansupul School, the *buldteok* where knowledge transmission occurred to develop a process of understanding for the different generations of *haenyeos*. Triangulation techniques were formulated by conducting in-depth interviews and focus groups to analyze the validity of the data. The interview and observation notes were then coded into themes using an inductive exploratory approach where the themes were data driven conforming to an ethnographic approach of mirroring *haenyeos* realities (Bernard, 2017; Emerson, 2011).

Data gathered resonated with Ingersoll’s (2016) use of seascape epistemology to identify the ocean as a pathway for political, economic, and ecological processes. Admittedly seen through how the sea was – *haenyeos* place of work, life, and death, historically, the pathway for Japan and America to pursue their colonial goals, to use Jeju Island as a strategic location, and now a pathway for political agents to expand development. Ethnographic account with attempts to ensure reflexivity of the sites and narratives, thus builds an epistemological understanding of the “social structures, social transformations, and cultural negotiations”, (Tsing, 2005 as cited in Cerwonka, 2007) within the seascape.

2.3.2 Positionality as a Researcher in Jeju Island

Rose (1997) elucidates that a researcher's consciousness of their own positionality is needed to make better sense of the political and economic processes that they are continuously researching within. There is critique on the presence of complete “transparent reflexivity” between the researcher and their context, an area of work constantly being built by the geographers, within which Rose (1997) builds her own interpretive approach to understanding gaps within her research. The interpretive approach of knowing also allowed for my positionality as a researcher in South Korea to be analysed since the data observed, written and interpreted has occurred through my place in this world as a researcher (Cerwonka, 2007).

⁶ A term used by the author instead of “fieldwork” to recognize the ‘place and its beings’ at more than equal par with the academia (PAR, 2023)

Positionality and locatedness of the inquirer situates the knowledge that is being consumed within the necessary conditions (Alcoff, 2003 cited in Cerwonka, 2007), hence situating myself in Jeju as a researcher becomes crucial. Linda Alcoff emphasizes Gadamer's (as cited in Cerwonka 2007) point of 'situatedness' of the knower and their informants in providing the necessary conditions of what factors play a role in acquiring knowledge. Although attempts are made in the paper to bring objective knowledge, my own context and locatedness brings subjectiveness that must be unveiled, as suggested by McDowell (1992) to reach closer to objective understanding of the seascape.

Before coming across the community of *haenyeos* my knowledge about South Korea was built through my past relations with the people and their culture during my high school years in Vietnam and Ghana. My connections with the people and my continued passion towards the music and culture of the land, instantiated a curiosity towards how the progressing development goal pursued in South Korea was affecting its environment. The Master's program has been equipping us to approach what we observe within our own context, learnings, and observations critically. With this mindset I set out my research for *haenyeos* occupying spaces at margins of development but centrally affected by the expansionist goals of capitalism.

Being an 'outsider' in Jeju with expanding social and power differences may have led to certain kinds of knowledge being shared while excluding others. To obtain insight on all political-economic-social sphere of *haenyeos* a wider age group (Appendix I) of *haenyeos* were interviewed from multiple locations in Jeju. Although there was certain shyness observed in the initial conversations with Yu Kyong and other participants, however, after spending 2 days living with her and re-visiting others built a more trustful and open relationship. My attempts to learn Korean for this research, in preparing questions, with some being memorized further led to the participants opening up quickly. Multiple visits to Hansupul school, maintaining contact until now with all the participants and connecting with them outside the research sphere attempted to minimise the power and social differences present from 'the outsiders' research.

Chapter 3 Ways of Knowing – how, who, what, and where?

This chapter analyses the empirical findings using FPE to mount the argument of how the knowledge of women flourishes more-than-human relations through their embodied, emotive, and care work. While problematizing the knowledge gaps in the context of new generations, that construe from different sites interfering with this transmission of knowledge.

A typical day for *haenyeos* begins at 5 a.m. where every *haenyeo* group of the village comes together at their respective *buldteok* to do the same activity across the island (Appendix V). On 26th July I went with Yu Kyong to observe the *haenyeos* catch the urchins, which are excessively present in the sea to throw them out between the rocks away from the shoreline. Yu Kyong explained she had learnt diving in a “*systematic way at the school of haenyeos and whatever I didn’t know, I learnt with my group here at Sinsan-ri*” (Appendix III) and others will learn in their respective seascape.

Previously, the *haenyeos* gained the skills from their women family members (mother, sister, grandmother etc.); which would enable the villages to become increasingly aware and knowledgeable about the seascape, its management, and over-exploitation. Nevertheless, today the context has changed in that most of the *haenyeos* that aspire to be part of the village are not already part of it through kinship/family ties; hence are unfamiliar with the seascape and the manners in which to master the skills pertaining to it.

Continuing with their morning routine, the women then pick ‘*mugwort*’ leaves to clear their goggles before entering the sea, to prevent them from getting fogged up. They do not harvest urchins to eat during this season as it is not the season where they are most tasteful or ripe, however ever since they have known to be a *haenyeo* they’ve practiced this as part of their work. When going to throw the urchins away from the shore in between the rocks, Yu Kyong was guided by the older *haenyeos* to a safer path. A significant aspect of this practice is found in the shared boundary between the sea and land, which is inherently shared by multispecies respected by *haenyeos* traditionally as a non-linear permeable territory (Ojeda et. al., 2022).

The re-articulation of territories as living worlds with *haenyeos* daily practices in the new conditions, allows the existence of the relational spaces of *buldteok*, sea, boats, and shorelines to emerge. Shared respect towards the multispecies was moreover observed when Yu-rim, an aspiring *haenyeo*, had told me that whatever species they catch during their classes, they had to throw them back to avoid over-harvesting. Source of all these forms of care were illustrated by the older *haenyeos* through their practice and collectively working, non-discursive practice in this sense pertains amongst the *haenyeos*. Thus, discussion ahead stresses on how knowledge is crucially about the ‘process’ that would allow the younger *haenyeos* to learn by living a *haenyeo*’s life whilst adapting to their ways of knowing as opposed to merely seen as content (Berkes, 2017)

3.1 Waves of Knowledge and its Transmission

While waiting for the waves to calm down cumulative groans and conversations about body aches are felt and simultaneously discussed by *haenyeos* at the *buldteok*. *Buldteok*, an important material site for knowledge transfer, is treated as an extension of the sea that is shared for years by the *haenyeo* village groups. The old *haenyeos* hold diverse knowledge based on their history and its cultural significance within the situated seascape they have been diving in. Empirical knowledge of species, their ecological cycles (1st level of analysis, Berkes, 2017)

and ecological processes (2nd level of analysis) help understand how these processes are embedded in *haenyeos* life making them “more agile in the water” (Ingersoll, 2016). Through conversations with the *haenyeos* and participatory observation, the women metaphorically explained how *haenyeos* are familiar with the seabed like forest rangers are of their landscape.

A glimpse of this knowledge is demonstrated in my interviews with Kim, Yu Kyong, and *haenyeos* from *Pyoseon* who describes –

“more delicious urchins can be found in deeper waters, some corners and stones would have octopus underneath, and they would know whether the octopus is pregnant”.

Further discussions revealed how -

“baesam (sea cucumber) are usually found under rocks as they grow faster with sand underneath, because they feed on sand.” (Appendix III)

Different techniques used to catch were explained during the focus group conducted at Hansupul School where students at the school explained –

“conch is caught by hands, urchins are used by breaking the spikes, squirt is caught by poking the eye using kakuri, and abalone is caught using the bichang”. (Appendix III)

These enactments involve a knowledge that reconnects the *haenyeos* to their pasts, to their ancestors followed by cultural continuity (Berkes, 2017). Hence, it is seen here knowledge is handed down as forms of adaptive processes through oral transmission and observations over generations that becomes immanent in *haenyeos* way of living.

This generationally shared knowledge in discursive and non-discursive ways remains traditional in that it grows into a deeper form of bond; within which *haenyeos* both acquire it whilst adapting it to their ways of living. Knowledge in the context of seascape is also highly situated in the specific waters of respective harvesting grounds. Differed productivity of regions was described by participants of the focus group at Hansupul School, “*there are 3 areas where muljil is mainly done: between Jeochan – Pyoseon which is the most productive area with higher quantity of harvest, Pyoseon – Haalim, and Haalim – Jeochan*” (Appendix III). Additionally, an example of situated knowledge by *haenyeos* in *Jung-mun* village was the discovery of a “*new variant of sea cucumber, that looked more black/ red than usual, and the group had to get it checked if its edible for sale and consumption*” (Appendix III). The changing productivity in different harvesting grounds, discovery of new variants, and loss of others show the complicated interactivity of all species in the changing seascape (Leshkovich, 2014). Knowledge production thus is also (re)producing as the species, humans, and development changes pave the seascape differently.

To gain deeper insight of the work of *haenyeos* I participated in a diving class (Appendix V) to learn the knowledge shared to a small extent. During the class we were to use *kakuri* to poke and kill the urchins and octopus. As I poked the urchin in frantic moves, yellow clouds released out of its body, the *haenyeo* supervising stopped me and demonstrated by using both her hands how to stab and take the urchin out in one go. She advised that “*poking the urchin too many times either hurts and their yolk gets wasted, or they get afraid and move further back in between the rocks?*”. While I struggled to see in the sea, the *haenyeo* was confidently moving close to the seabed as she broke open an urchin and a school of fish gathered around her. Given half the urchin I failed to do the same until the *haenyeo* directed my hand near rocks where she knew the fish would come. Although this was described as a strategy to catch fish by Yu Kyong, the *haenyeo* did not catch the fish.

A spirit-based relationship between the *haenyeo* and the species was observed, an important part, alive at the margins of vast spaces of knowledge expressed through care and respect for

multispecies. Further reflection of such relations was felt in semi-structured interviews with the older *haenyeos* Ko, Daepyeong, Kim, “*the haenyeos would spot dolphins when working in the sea and would make the sound ‘bae allae, bae allae’ that would warn the dolphins to swim from beneath to avoid getting injured by the passing war and trade ships*” (Appendix III). Older *haenyeos* undertaking care work in the seascape were thus, first to notice the changes within the seascape, an important condition for the community’s social reproduction (Ojeda et al., 2022).

The knowledge of the interaction between *haenyeos* and dolphins was known through a breakthrough in an improvised unstructured interview led by my guesthouse owner, Sun Mi, who became an important informant. It provided the space for interpretation of different subjectivities within the *haenyeo* identity (Geertz, 1973 cited in Cerwonka, 2007). This information also came as a surprise to Yu Kyong and the students at Hansupul school as they were hearing about it for the first time.

Knowledge in motion is difficult to grasp with multiple sites (re)producing knowledge in Jeju with a multitude of narratives and agendas. Schools, as the main sites of knowledge transmission for the new generation showed gaps in the processes of how this knowledge was accessible and known through in-depth interviews. Firstly, (re)production of knowledge in textual form at various sites meant everyone referred to a different source (Appendix IV) for the harvest calendar, not sustaining the information originally known and informed for the specific harvesting grounds. Secondly, *haenams* cannot join Beowbang school as it only accepts women, demotivating them to pursue the work. Thirdly, Beowbang does not provide *taewak* making class, as explained by Oliwia (Appendix III), taking away the opportunity for students to interact and learn an important skill from *haenyeos*. Fourth, the schools provided a course of 4 months with classes only on the weekends which was seen as “insufficient” by all *haenyeos*. Fifth, only selective students according to their swimming and diving skills could practice in the sea for two Sundays of the month, not giving students much time to train in the sea. Lastly, A big part of the work is living with the community of *haenyeos* and being accepted in it by all *haenyeos*¹³ however, how to integrate and be accepted by the group was not discussed. This journey was found very difficult by Jang who was the first *haenyeo* to train in 30 years with her group as she worked hard to prove herself as a skilful, kind, and generous *haenyeo*.

All these experiences created gaps and a different embodied experience for new and aspiring *haenyeos*. Issue with the reproduction and transmission of knowledge fosters in the discursive and non-discursive practices at different sites where Foucault (Foster, 2000) argues power plays a role in whose narrative the knowledge reproduces.

3.2 Embodied Experiences of Muljil

Embodied activities practiced by the *haenyeos* took forms of: cooking and sharing food together, communing practices, defined by their beliefs about the island, and the desire of old *haenyeos* to continue harvesting despite their age and health issues (Nightingale, 2011). In the diving class (Appendix V) I also experienced a minute sense of what *haenyeo* work embodies to better understand and describe *haenyeos* lifelong work. Once in the sea I experienced it was difficult to follow commands of even just flipping the rock, but I had to go beyond that and find an urchin, poke urchins using *kakuri* in one sharp go and take it out with the other hand to swim back to my *taewak* floating on the surface. I came out to breathe thrice while the *haenyeo* teaching me the skill came for her *sumbisori* once. These diving practices, however, occur near the shoreline unlike how *haenyeos* dive much further down the sea to reach deeper depths, some being carried by boats as well.



Figure 4: Haenyeos and I getting ready to go into the sea, with infrastructure projects seen in the distance (Source: Author)

As they helped me get into the borrowed gear and shoes, I felt the significance of getting ready at the *buldteok* together as the “emotional” respect and care for each other emboldens the self in the seascape (González-Hidalgo et al., 2020). These depths are furthermore covered by the older *haenyeos* wearing a belt of lead stones around their waist to help them work at deeper depths. Mid-practice the belt was attached around my waist, and I reflexively swam harder as it took a lot more strength to stay afloat. The entire routine of diving, observing, and catching the urchins became a lot harder as I struggled to breathe even after I came to the surface. Whereas, I had observed *haenyeos* of the age 89-91 y/o diving and easily swimming back to the surface with the strength, skill, and experience of years.

Since most young *haenyeos* are outside of Jeju (Appendix I), they remain inexperienced and unaware of the seascape, unlike how *haenyeos* from Jeju had grown up swimming and learning the same. Hence, a common fear was shared by the aspiring *haenyeos* practicing *muljil* only in the controlled environment of their school where the catch is easily seen and caught. Whereas seafloor is very difficult to navigate, varies across the villages, and is occupied by differing diversity of species in varying numbers (aforementioned). Thus, *hanguns* and baby *haenyeos* look up to the *sangguns* as they hold the wisdom of the seascape. Moreover, Jang continued to explain the learnings from school were “*elementary school stuff compared to what you had to do with the haenyeo group which was high school*”. For Jang this was realized as a major disadvantage as she demonstrated how in the school’s fishing grounds everything was easily presented and pointed for the students to go catch in a controlled environment, whereas the real sea is unpredictable and wild.

Ability to perform *muljil*, share food, express, and narrate oral histories materialized the emotionally non-represented ways in which embodiment of *haenyeos*’ work and relations impacts the social group (González-Hidalgo et al., 2020). Ko, a retired *haenyeo*, showcased such intense passion to go back in the sea as she excitedly narrated her old days of being a *haenyeo*, “*I worked even when I was pregnant, for the first 4-5 months of her pregnancy each time I continued to go into the sea*”; later going on to explain her health issues, but still proudly mentioning, “*if I could, I would still do it*” (Appendix III). Furthermore, with temperatures dropping to 2°C the work environment is extremely difficult causing long-term health implications for *haenyeos* (researched by Lee et. al., 2017).

Dictating the embodied experience of their work is not easy to hone, develop, and continue up to an old age, which includes 60+ years of work. Understanding of these lived

experiences is reflected through the vigilant role of *haenyeos* in taking care of the species, harvesting the species in their non-breeding seasons, and showing mutuality in their seascape (Domínguez-Guzmán et al., 2022). Commoning is survived by the self-governing of the *buldteok* by *haenyeos*, also seen as an alternative space existing at the margins where collective decision-making about going to work, sharing the harvest caught at the end, selling it together continues (Sultana, 2021; Clemente et al., 2019).

Haenyeos' working conditions in the deep waters and continuing it during winters up till old age causes them to have chronic diseases, ear, and back pain, making them lose their hearing which was observed amongst the interviews with older *haenyeo* and those teaching at Hanuspul School. Despite the weathering of their bodies, they continue to *muljil* and produce their *sumbisori* due to their affinity to the sea, water, the species, and the duty they feel towards the seascape. Symbolic meanings in these spaces tend to become extra-material in the material defined and realized through emotions of love, care, respect towards their village seascape. In such moments the *haenyeos* are not the only agents in their ecology but are able to identify the sea and species as an equal agent pursuing more-than-human relations in their actions.

3.3 Community and Identity – From Sea to Plate

Lévi Strauss (1962, cited in Berkes, 2017) referred to ecological knowledge as a means of understanding the relationships of living beings with one another and their environment that *haenyeos* demonstrate through their daily practices. The women everyday get into the rhythm of stitching their torn gloves, cutting their diving suits, and helping each other wear them (Appendix V). Moreover, the manner in which the younger *haenyeos* took over to clean, serve, and take care of the older *haenyeos* is how ‘care’ and commoning materializes within *haenyeos* operating in isolation and against the development pursued on the island (Clemente et al., 2019). Similar feelings were expressed by Yu Kyong, “*you cannot live only by yourself. We are companions and we can save and care for each other*” (Appendix III). Further also repeatedly emphasized by the mother, “when we go to the sea, we share the work and the danger... we harvest together, sort together, and sell together, because the sea itself is communal” (See, 2019: 18).

Another realization of the ‘other’⁷, hereon, referred to as ‘outsider’ (Andreucci et al., 2022) was seen during the *haenyeo* teaching classes where I realized 8 out of 9 aspiring and young *haenyeos* I interviewed were from outside of Jeju, consistently seen in the case of the new generation. Thus, knowledge transmission for the new generations is mostly dependent on the sites discussed before in which they remain for a few months. This also aggravates another problem, since the sense of community within *haenyeo* groups is a core characteristic trait, it becomes “*hard when most of the new haenyeos quit early, making it difficult for older haenyeos who taught them to feel bad*”, Yu Kyong explained.

Furthermore, participatory observation (Appendix V) in Hansupul School during the *taevak* making classes and diving practices revealed how language was another undiscovered dimension of how identities differed between older and younger *haenyeos* further enlarging the gaps of knowledge. In this regard, Rose (1997) elaborates on how tools need to be developed to understand the mutual constitution of gender, class, race, identity, and so on, affecting the (re)production of knowledge. Although the women teaching the students to harvest and make *taevak* were the older *haenyeos*; they were barely communicating with each other during the process of learning. Further probing questions about communication revealed how a different language was spoken by the older *haenyeos* - “Jejuan”, which although perceived as

⁷ In this context refers to the aspiring *haenyeos* from new generation coming from outside of Jeju Island.

a dialect of South Korea, informants and younger *haenyeos* explained was a completely different language. Not recognizing Jeju language officially and homogenous development projects of the island with the mainland makes it difficult to be (re)produced in society.



Figure 5: Students learning to make their own Taewak at Hansupul School (Source: Author)

Other practices of travelling and harvesting in other seascapes (forthcoming), communicating with dolphins, citing other species have discontinued with lack of similar determination and spaces to continue (re)producing knowledge amongst the new generation. Due to the rough history Jeju Island itself is a “storied-place” (Rose, 1997) holding memories of the colonial past from Japan’s occupation and USA’s intervention in their independence (described before). Further, representing how (re)production of knowledge and relations for *haenyeos* and other species has occurred. (Re)production of TEK thus becomes crucial at this point since knowledge producers – *haenyeos* – largely consist of an ageing population.

These direct participation in classes were also done to become a participating “rounded” character myself (Emerson, 2011) where direct interactions and immersion in the knowledge sites highlighted the modes and obstacles of inter-knowledge transmission. Language here grows onto become an important factor in perceiving the subjectivity of *haenyeos* that are (re)produced through the sites of knowledge transmission. This implies, physically being present at the site of knowledge transmission is insufficient for the discursive practices to shape the identity of the new generation of *haenyeos*.

Hitherto, different sites have allowed understanding of different paths of how knowledge was produced, reproduced, and transmitted. Sites as the historic spaces have helped build the necessary ‘ahistorical’ termed by Nietzsche (as cited in Hans, 1995: 101) for the *haenyeos* to continue to reproduce within the unhistorical waterscape. Identities thus are very much embedded within the material where they take physical forms of relationships, learnings, and feelings. Social reproduction, hence, becomes a struggle to continue with the changing waterscape and sites of knowledge (re)production. With Di Chiro’s (2008) understanding of how social reproduction consists of “complex political-economic, socio-cultural, and material-environmental processes”, these diachronic changes of the island will be investigated next. So far, the inter-generational knowledge transmission, its gaps, and the sites where it occurred was examined, next the (re)production of *haenyeos* identity in the developing politicized ecology will be analyzed.

THE EVERYDAY – AN INTERLUDE

After my first day of doing observations at the *buldteok* and the sea where the *haenyeos* worked, two typhoons came back-to-back ending the harvest season earlier for the *haenyeos*. Every day I would message Yu Kyong whether they were going to work in the sea (in Sinsan-ri) since it could not be predicted by anyone beforehand. From July 28-30th she told me that the *haenyeos* had waited for 2-3 hours every day and were unable to go and do their seasonal picking of seaweed. On 31st July she frustratingly said, “*we were only able to work for an hour and had to return since the tides were higher and harsher*”. In these days not just the *haenyeos* but everyone around me was following the weather forecast religiously as typhoon ‘Khanun’ was landing near Jeju’s eastern coastline. On the 1st of August, Yu Kyong again texted me, “*they will not work in the sea again since the typhoon warning was moved forward and the haenyeo groups in Sinsan-ri (east coast) were banned to work*”. These delays and the following conversations between me and Yu Kyong allowed me to see how the always changing sea and the unpredictability it came within a [GK2] changing climate, impacted the lives of the *haenyeos*. Although when the *haenyeos* did not meet at *buldteok* they would engage in their individual works, also making it harder to situate myself in those spaces one-on-one with older *haenyeos*. However, the growing number of hours as per Yu Kyong also led to “*raised tensions and frustrations amongst the women and some village groups end up having more arguments*” when emotions run high.

Chapter 4 Shifting Boundaries of Muljil

Building on the last chapter the gaps of knowledge transmission get wider when the “context” is not remote but interacting at the centers of power influencing livelihoods intergenerationally (Scoones, 2015). *Haenyeos* generationally have increasingly moved away from *muljil* because it does not provide a sustainable income with declining species to harvest, degrading conditions of the sea, and political and economic processes that lead to failure of social reproduction. Adding onto White’s (2020) view of social reproduction which is both “a gendered and a generationed process... shaped by historical and existing gender and generational relations” also encompasses transmission of embodied, communing, and emotional knowledge as discussed in last chapter. Thus, when analyzing inter-generational livelihoods – social reproduction – embeds in the analysis of the *haenyeos* as the new generation faces challenges in reproducing the same education, skills, embodied experiences of *muljil* within the developing island.

This paper contributes to Ojeda’s (et al., 2022) feminist critique recognizing the “inseparability of economic production and social reproduction”, analyzing the shift in *haenyeos*’ working culture that are not independent of the political and economically driven environment of Jeju. Furthermore, to *analyze* ‘political’ processes that become centric in understanding the changing seascape of *haenyeos* as part of their social reproduction both discursive and material (non-discursive) practices will be investigated (Well, 2009 as cited in White, 2020). While examining the process and practices of the political agents working within ecology but outside of the social group, it benefits to see how institutions and their political processes are independent of the discursive understanding constructed by *haenyeos*, extending to understand their objective.

FPE has enriched the understanding of *haenyeos* embodied, emotional, and physical experiences and feelings, but the discursive representation of the embodied ‘body’ has meant that it has no ontological status of itself and is constructed entirely by historical inscriptions (Butler, 1989; Knio, 2021). Butler (1989) explains that Foucault identifies “body as a source of resistance to history and culture” that undermines his view of body being a discursive site. Underlining the causal mechanisms (re)producing the political and economic processes diachronically both ideational and material practices are entangled - shaping new identities taken up by a new generation of *haenyeos*. Analysis of these participating forces of agents and social institutions present within the politically embedded power relations thus becomes crucial. Hence, contextualizing and recognizing the historical and material realities present beyond our situated reach (Nast, 1998: 58 as cited in Rose, 1997) is necessary to examine the interests of political agents at the margins of PE.

Combining these different perspectives allows the research to depict why and how the *haenyeos* as a group are decreasing in number; in an account that goes beyond decreasing levels of harvest in the sea. Power and authority are present and exercised asymmetrically for the island and its resources within the political and economic processes (Paulson et al., 2003). These processes will be analyzed through 3rd level of analysis (Berkes, 2017) the modern management of the seascape in village cooperatives using the data gathered through in-depth interviews with the older and aspiring new generation of *haenyeos* and secondary data mentioned previously in literature review.

4.1 Working of a *Haenyeo* Village Cooperative

Harvesting grounds, although constructively understood continuously in time and space by *haenyeos*, their boundaries have materially been transformed by development processes shaping the collective practices of the social group (Nightingale, 2013). The paper aims to strengthen the wider structural and political implications with the recognized mutually constitutive relationship of *haenyeos* and the seascape. Starting with the problematization of boundaries using Nunan's (2010) work this paper goes on to bring in the work on "collective memory" and delve on entanglement of the material and ideational to give seascape and the interacting bodies ontological powers of their own making clear boundaries between what is known objectively and what is constructed subjectively. This outlook will bring the situated *haenyeos* subverting identities reshaped by institutions policies across scales – into perspective (Tania Li, 1996 as cited in Scoones, 2015).

Fishing rights were given to individuals, firms, and fishing village cooperatives by 1972 (Han, 1993 as cited in Cheong, 2010) creating boundaries in the seascape for the first time. This was also a time for the Korean Economy to start moving from agriculture-driven to urban manufacturing economy and become part of the neoliberal wave (Freeman and Katz, 1995). Seascape, previously seen as an unbounded entity co-existing with more-than-human relations, was not rendered for encounters of be-coming to occur (Bourguignon et al, 2023). Thus, the creation of institutional boundaries in the seascape problematized the mobilization of *haenyeos* and brought gaps within the village fishing groups that rippled in large-scale changes observed by individual villages.

How 'new identities' were formed within these village cooperatives and notably for mainlanders 'the outsiders' will be discussed using data to inform on how context is shaping the future generations. Oliwia helped signify the role of "collective remembering" that emphasizes both diachronic and synchronic analysis of "political culture" (Liu and Khan, 2021). Originally from Poland, Oliwia travelled to Korea in 2009 and learnt about *haenyeos* in 2016. She decided to seriously pursue the *haenyeo* work by joining *Beobang* School and earlier in September also started her internship in Jung-Mun village where she now lives. Conversation with Oliwia was surprisingly the first revelation towards the inner processes evolved within village cooperatives.

Oliwia described that,

"If you are an outsider, it is important you have lived in a village for 2 years to be familiar with the area. It is important for cooperatives to assign you a haenyeo village. The internship lasts for 3 months, and you need to be approved by all the haenyeos in the group to be able to join, you don't get another chance in any village... according to the monetary assets held by the groups, there is an entry fee that needs to be paid which is very expensive (for Beobang it was \$5000)." (Appendix III)

Yu-rim had further explained the refusal of some *haenyeo* groups to intake new girls,

"because the haenyeo village cooperatives get money that gets divided amongst the members. Increase in the number of haenyeos would mean more division of money within the group."

Indicating the political and economic processes that become a barrier for the new generation to find pathways to build healthier relationships – creating a crisis of social reproduction (looked in detail in next section). The entrance fee is required for insurance purposes that is put in the pool of assets owned by the *haenyeo* group that they will divide within themselves. For younger *haenyeos* it becomes difficult to pay the hefty amount to join an occupation that does not pay enough. Alternative economy represented by the likes of village

cooperatives is usually perceived as marginal (Gibson, 2008) and inconvenient for the budget ignoring the contribution they bring to the communities of all beings through their more-than-human care for the seascape. These cooperatives being part of the alternative economies operate with similar communal ethics of solidarity (Gibson, 2008) both in terms of care and economy.

Conversely in Jeju, the materialization of boundaries in the seascape dividing each village's *haenyeos* and disabling them to move and work outside of their village problematized immobility (Nunan, 2010). In the past Kim alluded to how she, “*worked in Yeon-pyeong before marriage and after marriage she worked shortly in mainland, before moving to Sinsan-ri*” (Appendix III) while Ko, “*went with a group of 10 girls to Taebeung-ri to work because savings were better there, and then would return to their village*” (Appendix III). Immobility, furthermore, not only causes restrictions in terms of their accessibility and earning (Nunan, 2010), but also in terms of social reproduction, and work which embodies the cultural meanings of caring and sharing in the new seascapes explored.

These boundaries formed between *haenyeos* and their own environment needs to be theorized to comprehend the causally emerging identities (Nightingale, 2013) from the interaction of human and non-human world with the involvement of political agents and structures. Impact of these emerging identities was seen when *haenyeos* were asked whether they could harvest in other fishing grounds, and they responded with “*there have been written records of those fights*” (Appendix III). Thus, ways of dwelling, harvesting, and sustaining their income within the fishing grounds has changed for the *haenyeos* over the course of time with the immobility imposed by the village cooperatives (Lauer, 2016).

Since village cooperatives gave rights for common fishing grounds and not resource use rights, sale of the harvest is not entirely controlled by the *haenyeos* in terms of seller and price (Cheong, 2010). This involved banking sector, village heads (mostly male) to take responsibility to manage sales that was previously fostered by the *haenyeo* groups themselves during the practice of ‘kye’ (Cheong, 2010; Montgomery et al., 2018). Asserting leadership and decision-making was thus a struggle for the *haenyeo* leaders since all changes about the seascape, new species varieties found, and other disputes between groups are taken to the village heads (Ojeda et al., 2022). Looking back at the unstructured interview with Ko, I realized she had described her earnings as savings, insinuating that they first had to share their earnings with the group and the collector that hired them, and the rest would go towards their savings.

The cooperative includes both market and non-market transactions regarding *haenyeos* earnings and savings. Competition also arises through economic processes of large scale artificial production of species by the companies, evidently heard in the focus group, “*to catch octopus companies use weir (fish trap)... they produce sea cucumber in nursery instead since they cannot catch it, making the market more competitive for the haenyeos catch*” since it is more expensive, than other cheaper forms of large scale productions. Oliwia similarly reiterated, “*women used to catch just seaweed before and make most of their earnings, but now it cannot sustain them because its bought at cheaper prices in other places. Moreover, once the group decides who to sell their catch, there is not much freedom to sell their catch to different buyers*” (Annexure III).

Transformed ecology of the village with further development projects, demographic expansion (Lauer, 2016) and the waterscape with the established boundaries have altered the work practices of the *haenyeos*. Yu-Kyong who has had opportunities to work in different village fishing grounds as a reporter described these changes, “*there are many 못가사리 (agar agar) around the island, but now it only remains in Pyo-seon, Hado because it grows in fresh environment*”, moreover “*모자반 (sargassum, a variety of algae) now only grows in Gapa-do*” (Appendix III). The causal mechanisms of these socio-ecological, dwelling, and practical changes will be analyzed next.

4.2 Politicizing Social Reproduction of *Haenyeos*

Production and social reproduction in our contention are not seen as separate but rather as inherently embedded processes in themselves, both affecting the other by Ecological Feminists (Federici cited in Ojeda, 2022). Thus, politicisation of production processes also politicises the reproduction of *haenyeos* as a social group especially for Jeju which is fraught by large scale development projects and colonized history. Crisis induced in social reproduction of *haenyeos* will be observed through diachronic analyses of their historical context, with ‘collective remembering’ shaping new identities, while also introducing and analysing the different economic policies and processes that further delegitimize the rights of *haenyeos*.

Subjectively known identity of the older *haenyeos* was produced through the everyday practice of meeting at the *buldteok*, sharing information and daily experiences of doing *muljil* in the sea (Nightingale, 2011). These practices evolved during the colonized period and the transition to independence both led by different powers namely, Japan and America, that path-shaped working and environment conditions for *haenyeos*. Earlier the older *haenyeos* worked and earned for their siblings and children to study and get better education (Appendix III) because their work was not regarded highly in the society. Yoo Jung, the leader of the *haenyeo* group in Daejong said, “I joined the work because everyone around me did so to earn”, the saying in the island echoed such beliefs “daughters - providers - had been born” (See, 2019: 77). *Haenyeo* work was one of the few works available for the women at the time, as “the island did not offer a variety of jobs” reiterated by Ko, Soo-Yeon, Kim, Yun-Soo, and the department of *Haenyeo* Association.

Although collective remembering has shaped the symbolic meaning of *haenyeos* for new generations, the reproduction of those subjectivity is limited to the embodied activities/experience of *haenyeos*. The island has evolved at a rapid pace with development providing alternative jobs in manufacturing and services sector, and thus, the generation joining the *haenyeo* groups is mostly from outside of Jeju. The main motivation driving ‘outsiders’ to join the group has been shaped by the recognition from UNESCO, 2016, observed during interviews with the aspiring and young *haenyeos* citing how UNESCO had brought the *haenyeos* to light for them. Social reproduction of *haenyeos* faces challenges in identities that are only discursively constructed from the past legacies through collective remembering, when there is an emergence of new material realities in Jeju that needs to be recognized (Gibson, 2001 as cited in Nightingale, 2011).

For the new *haenyeos* (outsiders) schools, museums are the sites of learning, thus narratives of political institutions behind the sites disrupts the paths of learning and embodiment. Instances of such disruptions were seen when Oliwia explained, “*equalising training given to students at schools is questioned by the older haenyeos*”, as they never specifically learnt it, “*but just naturally equalized in the sea*”. This brought a further recommendation to change the shape of the (goggles) used currently, as they made the nose inaccessible making equalising risky both in terms of long-term and short-term health implications. Older *haenyeos* see this change of shape as a symbolic change to their traditions that they believe will ripple out in other directions of cultural value towards the work (Appendix III).

Furthermore, implications caused by the narratives of the Jeju Self-Governing Province led by tourism and expansion of its industry, were seen while attending a class in Hansupul School. When asked about their motivation and process of joining a *haenyeo* village, most students had joined to try a different experience during summer, others were learning while continuing their pluriactivity, and some said it’s something they will think of seriously working in later 30s. Further probing questions were asked to students seriously thinking of living in Jeju, if they were aware of the previously described processes of enjoinderment – most were not. Previously described instances of how seascape knowledge was seen as “insufficient”

when taught through set up institutions instilled fear in *haenyeos* about the limitations they will face both emotionally and physically in the seascape particularly for “outsiders”. These differences are produced because political actors unaware of the gaps and the needed transmission of non-discursive practices. Political forces relate to the seascape as a “resource” compared to the emotional well-being pursued by *haenyeos* through their interactive relations with the seascape (Berkes, 2017).

The discussion of the non-discursive in the material makes further sense with Marx’s “practical materialism” (as cited in Foster, 2000: 2) where he asserts the constitutive role of humans as agents in their cycle of reproduction and in actively producing social norms. However, what is not realised in this material conception is that nature is as much an agent as the *haenyeos*, islanders, and mainlanders for interaction to result in emergent relations. Thus, changes brought to that nature have construed political, economic, and cultural consequences to the social reproduction of *haenyeos*. Instantiations of expansion project seen in the upscaling of artificial abalone production, which was “disliked by the *haenyeos* and some islanders” (Appendix III) because artificially abalone grown in shallow waters affects the quality of abalones, while those caught from the deeper seas by *haenyeos* are bigger and more flavourful.

In addition to the large-scale production sites, Jeju has also seen development of 8 sewage treatment plants. Woljeong-ri village saw the most recent development of a Dongbu Sewage Treatment Plant that had been protested against by the villagers and the *haenyeos* who were specifically against the impact it would have on their seascape (Kim, 2023b). Older *haenyeos* have claimed that the disappearance of the species like “conch, abalone, *obunjagi*, agar agar, octopus, etc., which were commonly caught in the sea of Woljeong-ri, but also seaweeds including *gamtae* (a food source for abalone) have disappeared” (Kim, 2023b). *Haenyeos*, seeing the diachronic changes between Woljeon-ri and the neighbouring villages cite the pollution coming from the treatment plant as the reason for Woljeong-ri’s seascape. Influx of tourist population is cited as a reason for expansion of the plant, whereas *haenyeos* argue both influx and the expansion are causing damages to their bodies, species, and the sea (Kim, 2023b).

Tsing’s (2005) work on describing uncontrolled scales of expansion that aim to align with the global development projects is seen in Jeju’s ambition that commodifies seascape in a way that damages the lives of *haenyeos*, and species living in it. These projects are aimed to satisfy the rising market in Jeju as opposed to the growing needs of the locals residing in Jeju dispossessing *haenyeos* of their rightful access to the fishing grounds. Such indirect dispossession shows how the larger political and economic forces treat the declining population of *haenyeos* as “territorially defined intact whole within the remit of the projects” (Sultana, 2015). Next the chapter analyses how these processes effect, exclusion of ‘outsiders’, *haenam*s; and the ways in which development projects are resisted. Furthermore, with the institutional gaps in knowledge transmission and their representation of the work majorly being built by “communicated memory” it lacks the collective action needed to resist the forces of development discussed in the next chapter.

LIMITATIONS – AN INTERLUDE

While conducting semi- and unstructured interviews in different villages of Jeju, I came across major limitations important to mention since they will insipid the conclusions drawn from this fieldwork to an extent. The knowledge and changing livelihood claims made in this paper are limited to the 8 locations visited in Jeju that do not reflect realities of the others not visited. Moreover, the interviews conducted although from diverse villages were only conducted with an average of 3 participants from each village limiting the knowledge of the seascape to them.

Temporal limitations in the conduct of research which lasted for 3 weeks on the island also gave limited time to explore in-depth interviews with some informants. Language barriers faced on the island upon research emerged as a layered problem of seeking translation for two languages: Korean and Jejuan. Interviews in later 2 weeks were conducted with a local translator (Jee Eun) from Jeju, producing subjectively understood meanings of conversations, to which I responded by recording the interviews (after seeking participants permission) directing Jee Eun to mirror the conversation completely when transcribing in English. Otherwise, translation apps like Papago and Google translation were also used to communicate which not only limited expressive meanings of what participants wanted to explain but also the cultural syntax.

An in-depth interview with Oliwia – revealed limitations of language and cultural barrier, as our conversation became easier without translations and misinterpretations, however it also meant to see an ‘outsider’s interpretation of *haenyeos* work. Furthermore, this interview laid out probing questions for more in-depth interviews conducted with the participants.

Additionally, although writing observation notes from participatory ethnographic research leads to subjective understanding with “choice of words, sentences, style, chronology of events” I routinely wrote/ recorded voice notes to “mirror” observed realities of the day (Emerson, 2011). Keeping the limitations in mind the next chapter of this paper seeks to make a broader analysis of this phenomenon.

Chapter 5 Where does FPE lead us?

Until now this research has laid out the data and arguments to explain how feminist understanding of a ‘politicised’ ecology is necessary using context by analysing the years of work and life lived by *haenyeos* in their changing seascape. Van Dooren and Rose (2012) have explained,

“The embodied, situated, kinetic and narrative nature of place — highlighting the way in which places are understood and embedded in broader histories and systems of meaning. But stories and meanings are not just layered over a pre-existing landscape. Instead, stories emerge from and impact upon the way in which places come to be — the material and the discursive are all mixed up in the making of places.”

Thus, acts of embodiment of *muljil* are embedded as reiterated before within a developing landscape that is defining *haenyeos*, Jeju, and the seascape differently for the new generation. Moreover, macro-level political economic forces aim for higher profitability that influence the ideology of structures shaping the existing identity of *haenyeos* as well that (re)produces itself with the new generation.

Rochealeau and Nirmal (2015) critique and respond to PE with FPE by identifying the role of women who closely work, rely, and are affected by their surrounding ecology, while also acknowledging how socially constructed epistemology is used, but strategy is needed to make sense of “parallel domains of organisation and authority”. With the contributing works of Al-Hindi and other geographers the analysis ahead consists of using the discussed shifting identities, “collective remembering” (Wretch, 2008), and gaps they form due to their contingency and controlled narratives of them. Further explaining the disrupted knowledge transmission to better identify how aforementioned political and economic processes shift this narrative and bring gaps. Finally, how these gaps constrain women’s role in their seascape as “vigilantes” (Ingersoll, 2016), create barriers in their movements and resistance for multispecies justice is emphasised.

At this juncture, the paper continues its attempt to satiate the limitations acknowledged in FPE to strengthen its argument when analysing how development is impacting inter-generational knowledge transmission and livelihoods of *haenyeos*. This is done through the scalar analysis of how political and economic processes at the margins are constituting and impacting the centre occupied by situated knowledge and embodied practices of FPE.

5.1 Commodification of Identities

Identity for the older *haenyeos* living in Jeju consists of “collective memory” of colonial times that exposed the women to war fought between Japan and America to attain control over Jeju. However, same is not the case for the future generations that mostly comes from outside Jeju. A past that is not shared – becomes harder to relate to as its “communicated memory” (Assmann et al., 1995) rather than a “collective memory” and thus collective identity is no longer completely known to the outsiders. This gap within identity was seen through the new generations motivation itself to become a *haenyeo* as discussed before, thus not making them dependent nor spend the time living in Jeju for longer periods, since it attracts people for tourism purposes for short periods.

Geographers’ input in FPE framework on ‘situatedness’ and ‘subjective’ identity bring context that helps understand how in the developing island the needed attune-ness to *haenyeos*

work is missing (Nightingale, 2011). Liu and Khan (2021) cite collective memory as an open system using Bhaskar (1975) that evolves with objective narratives of, “communicated meanings, and collectively shared knowledge” (Assman et al., 1995). Diachronic look at the political shifts of how *haenyeos* construed their identity and embodied work is narrated through “collective remembering” by the state that aimed to bring recognition to *haenyeos* work (Wretch, 2008) without objectively emphasising on context of Jeju’s colonial impact on *haenyeos*.

Communicated memory of *haenyeos* strength, resilience, and economic contribution from the colonial times has evolved the tourism industry on the island to expand ways of accumulation. Ingersoll’s (2016) work in Hawaii had presented similar evolution of tourism seen with the development in mass media that represented the ecology of Kanaka surfers as “valuable and desirable place, one of soft primitivism”. Similarly, UNESCOs’ link with *haenyeos* although given to preserve the culture, has also amplified it as “a new commodity, a romanticised, chic, and adventurous selling point” (Ingersoll, 2016). Moreover, synchronic analysis of the political and economic culture of the island revealed the narratives brought in by UNESCO and South Korea in their policies of attracting tourism to expand development on the island. Critical engagement with these synchronic contingencies helps understand what direction feminist perspective needs to take to resist the oppressions of large-scale social structures and narratives (Al-Hindi, 1997).

Dramatization of the history of *haenyeos* can be seen in discursive forms spread by *Haenyeo* Association handbooks and pamphlets where the history of Jeju Island is described as a “great drama” (Jeju Special Self-governing Province, 2019). Such a narrative has not only pushed the work into a spectacle that Tsing (2005) refers to expanding the scale of this cultural project without defining the boundaries of that scale. It also conforms to the narrative of “then and there” (Jeju Special Self-governing Province, 2019) for *haenyeos* lives, referring to *haenyeos* as a thing of the past as they will inevitably disappear. This belief devalues the social and ecological reproduction that is already seen with the drastic decline of *haenam*s over the years. During the visit to Hansupul School, 2 men had shared their concerns over lack of acceptance of *haenam*s now in *haenyeo* groups and absence of dressing rooms as well (Appendix III). The challenge also remains whether the ‘outsiders’ being attracted to *haenyeos*’ work will become cognizant with intricate details of *muljil* and the seascape which requires to make a life choice (not a need).

During a transect walk in *Sinsan-ri* with Sunmi in search of old *haenyeos* we came across shops and restaurants using ‘*haenyeos*’ in their names to attract tourists. Sunmi was quick to recognize such shops as she knew the owners and their occupation, pointing out that there were no *haenyeos* living there. Multiple sites near the shoreline also had regular performances by the older *haenyeos* that went out to catch the seafood and became a ‘spectacle’ for tourists to watch. The women seeing the tourist attraction had built a restaurant towards the shoreline where older *haenyeos* sat in the blasting sun showing their catch of the day. The dependence on spectacle (Tsing, 2005) by the *haenyeos* is rather a recent development with UNESCO that has expanded the sources of capital accumulation for not just the *haenyeos* but the island at large.

Current conscious making of the spectacle is done by *haenyeos* themselves as an alternative source of income as they face challenges of lower harvest left in the sea. Tsing (2005) in *Friction*’ discusses this scenario as the moment where capital production takes over social reproduction as a goal. The spectacle built around Jeju itself is used to its full potential by the state that has scaled its development ambition to the extent that there are direct flights from Taiwan, China, Japan, Hong Kong, and Thailand to the island. Within the period of research on the island many visiting tourists were seen from some of these countries citing Jeju’s accessibility as the reason for their travels. Such a rise in the tourism industry raises the

living standards and expectations of the island to the macro-narratives of global development infusing more socio-ecological damage to *haenyeos* and their seascape (as discussed before and further).

5.2 Isolated Protest and Activism on the Island

Caring for the seascape for generations the women are the first one to notice the environmental transformation taking place (Ojeda et al., 2022) with the increase of urchins, plastic pollution, and lesser seafood to catch. The struggle to bring these concerns to the forefront is not only limited by the gender and power dynamics in decision-making institutions but also the old average age of the remaining *haenyeos* that are divided by the previously discussed boundaries materializing in their seascape. Multispecies justice inspired by a gulf of more-than human works and theories built in FPE emphasise on the multi-dimensional focus needed to overcome crisis created by capitalism and its need for expansion (Ojeda et al., 2022).

Recent agreement between South Korea and Japan on Fukushima's release of water from its nuclear plants in Jeju's waters has raised concerns amongst the *haenyeos* and fisher people at large that it will contaminate seafood (Kim, 2023a). The concern further grows for *haenyeos* that dive and work in the waters of Jeju to which Chief Koh (of *haenyeos*) claimed she will have to stop the work she knew she would have done till death (Lee, 2023). *Haenyeos* during the focus group also complained about the "negative opinion prevails over Fukushima discharge" and similar feelings were shared about the Chernobyl's case.

The development of the Sewage Treatment Plants described before has also led to movements by the Woljeong-ri village *haenyeos*. Need for multiple and expanding sewage plants is the influx of tourism that further meant construction of infrastructure for the tourism industry as cited by Jeju's Self-Governing Province report (Kim, 2023b). Expansion of infrastructure and capacity of the plant met with 'political' resistance by the *haenyeos* that assumed leadership for the protests. Given their experience of working in the seascape and embodying the more-than human relations on an everyday basis, they were not only able to identify the ecological changes first but also feel them physically through itchiness all over their body and burning of the eyes. Such unequal distribution of environmental threat to the lives of *haenyeos* is felt and realized as their daily source of income also declines with lower catch available in the sea iterated by Yu Kyong "was able to collect 50kg of conches before, now only 30kg" (Appendix III).

However, these protests remain very isolated in terms of leadership and mobilisation. With the creation of boundaries and village cooperatives immobility has also meant rising territorialities and differences amongst *haenyeo* groups as described before. Thus, the groups are mostly unaware of the protests happening on different parts of the island. Yu Kyong had explained, the women are too old and busy in their own lives and always working in either the seascape or other pluriactivity that they are following. Territories that have remained fluid in *haenyeos* conception of seascape with multi-species sharing rights and resources of ecology has become an area of contestation (Ojeda et al., 2022). Aforementioned large-scale construction of infrastructure in coastal villages that invalidly also claims the seascape through its impact on the water and the livelihoods depended on it has led to older *haenyeos* spending more time pursuing pluriactivity, and further not recommending the work to their children.

In these times it becomes imperative for the women to use their knowledge of the seascape and its changes in unity to develop an alternative narrative led by *haenyeos* bringing their concerns together to mobilise a stronger protest. Such knowledge of the changing ecology and its impact on the spirit of *haenyeos* would help align the passion of both young and old

generations towards their work and life forging new capacities and capabilities to bring changes for the future of the island (Tsing, 2005). Further attention needs to be given on how the fast-paced development causes multi-dimensional “inequalities, injustices, and degradation” (Ojeda et al., 2022) for the islanders, species in the sea, and the island at large. Sunmi, the guesthouse owner explained how by 2026 they will have to migrate since the owner had planned to sell the building along with others for an infrastructure project, an example of how the undefined scale of development penetrates daily lives.

Other forms of resistance can also be taken up by continuation of their ancestral rituals that are performed in villages by shamans, highlighting the spiritual roles the seascape and the island itself hold for *haenyeos*. Although this paper is limited by its scope to discuss the shamanistic culture of Jeju, its importance is validated by years of continuation of these practices that become a part of the embodied and belief-driven cultural practice. The non-dichotomy of nature-culture in the learnings of shaman culture of *haenyeos* is seen through their relationship with the sea, mountains, *oreums*, tides, winds, and landscape of Jeju (Rocheleau and Nirmal, 2015).

Collective remembering with the larger narratives of the museum and the history reiterating *haenyeos* legacy and commending their sustainable practices needs to be further realized with the contingent realities of the changing seascape. *Haenyeos* that although started their work for the purpose of income generation have built a relationship with the sea and their community that lasts until their death. They have recognized the plurality of lives that their work shapes including their own as they work with the sea, inhabiting the space with other life forms that have been communicating, responding, reacting, and reproducing with them. Caring of the seascape needs to be recognized by states not just by giving rights to fishing grounds but also respecting the source of lives existing and dependent on it to delineate from projects degrading the seascape.

The goal of social reproduction seems stark since the older *haenyeos* struggle to continue their work with the failing reproduction of the seascape. This realm of reproduction of ecology with the social group seems side-lined in the current pursuance of preserving the history of *haenyeos*. Acknowledging the reproduction failure caused in all dimensions of *haenyeos*, species, ecological lives would lead to the understanding of emotive aspects that are taking place within the political-economic spheres of the seascape (Nightingale, 2013; González-Hidalgo et al., 2019). Thus, the symbolic meanings, embodiment of work expressed by both younger and older *haenyeos* in their own ways, with the visible and materialized environmental injustice needs to be manifested streamlined in their energies at the centre of capitalism.

Breakthrough from the margins with the instilled collective identity of *haenyeos* of co-creating a “caring, strong, resilient” (S. Barca et al., 2023) community needs to be mobilized to produce a counter-hegemonic discourse that shifts away from referring to *haenyeo* as legacy and a thing of the past. The paper’s attempt to pursue the objective gaps materializing due to structural failures through reflexive method of discussing the different narratives shaping *haenyeos* lives has been able to see in the situated identities of both older and younger *haenyeos*. Moreover, the situated knowledge and gaps discussed before calls for the collective action needed by both the generations to re-generate the reproduction of the seascape that has halted.

Chapter 6 Conclusion

The research objective of this paper sought to understand the knowledge-transmission and impact of livelihoods of *haenyeos* in the capitalist pursuit of development in Jeju Island in three steps. Firstly, identifying and conducting research at the sites of knowledge-transmission that would ground the younger and older *haenyeos* with the contextual knowledge they hold and forge to pass. Secondly, analysing the political and economic changes, the seascape has diachronically observed from the Confucianist times to the colonized history, leading to historical significance of *haenyeos* represented by UNESCO's policy. Finally, coming back to understand how the synchronic contingencies framed differently with the contextual understanding of the seascape, shape the future of *haenyeos*.

Overall findings have led to signify that there are gaps in the knowledge-transmission due to the structural gaps present within the institutions and their agendas to preserving the heritage of *haenyeos*. The aspiring *haenyeos* that mostly come from outside Jeju depend on collective remembering paved by the state in producing a culturally strong heritage view of *haenyeos*. This narrative has led to some extent creating a 'spectacle' of the *haenyeo* work that can be experienced and embodied for short-term in Jeju. Meanwhile, the embodied experience of the *haenyeo* community that daily care, work, and mobilise efforts to oppose development through their protest and continued practice of rituals is being unacknowledged with increasing boundaries within seascapes, politicisation of reproduction as production and accumulation of capital is pursued by the state.

Panoramic view of the *haenyeos* brings into focus the until now ignored view of how (re)production has been politicised within the island that changes their knowledge, its transmission, and the identity of *haenyeos* for the new generation. Thus, to understand how the population of *haenyeos* and the species is declining on the island, it requires an ambitious view of how and where their knowledge and identity takes shape and changes. The research has attempted to see those forces of development and reveal the narratives that forge the future that continues to not recognize the enlarging gap coming in the inter-generational knowledge transmission that as discussed goes beyond the content and work but is embodiment in the way of life.

This study attempted to deepen the understanding of FPE and the situated knowledge it brings light to within PE, while building on the limitations of how notions of 'subjectivity' and subjective identity undermines the determining objective bringing in a scalar analysis of the political and economic processes and narratives shaping the closed-off knowledge for the new generation. Thus, striving to posit how the (re)production of knowledge and lives of *haenyeos* is being pushed and pulled within the forces of development. Although this paper brings light to those structural gaps and recommends relevant actions, further research on the subverting identities of the new generation and testing of waters around the Jeju fishing grounds would reveal better insights on the needed actions by both the state and *haenyeos*.

Appendices

Appendix I: Details of the individuals interviewed (Semi-structured and Un-structured).

Note: In this cultural context it is considered rude to ask women their age, thus the author avoided the question.

Name	Age	Position	Originally from	Place of interview in Jeju
Yu Kyong	In 40s	Sangoon	Seoul	Sinsan-ri
Ko/Go family	In 80s	Retired haenyeo	Jeju	Seongsan-ri
Yu Rim	In 20s	Aspiring haenyeo	Seoul	Hallam, Hansupul school
Oliwia	In 20s	Interning at Jungmun	Poland	Jungmun
Kim (anonymous)	89	Sangoon	Jeju	Sinsan-ri
Maria	In 20s	Aspiring haenyeo	Seoul	Hallam, Hansupul School
Min Jong (haenam)	In 20s	Junggun	Marado	Jeju-si
Yoo Jung	Unkown (60+)	Haenyeo group leader	Jeju	Daejong
Jang Hye Suok	Un-known (50+)	Retired haenyeo	Unknown	Daepyeong
Cho Eun Byul	In 20s	Aspiring haenyeo	Outside of Jeju (Incheon)	Pyoseon-ri
Oh Na Young	In 20s	Aspiring haenyeo	Outside of Jeju (?)	Pyoseon-ri
Park Cho Yorang	In 20s	Hangoon	Pyoseon-ri	Pyoseon-ri
Kim, Sun mi	Unknown (50+)	Not a haenyeo	Unknown	Seongsan-ri
Hyun Kyung	In 20s	Aspiring haenyeo	Mainland Korea	Hallam, Hansupul School
Suzi	In 20s	Aspiring haenyeo	Mainland Korea	Hallam, Hansupul School
Park Sung Bin	Unknown	Staff member of Haenyeo Association	Jeju	Jeju-si
Staff member at Haenyeo Association	Unknown	Staff member of Haenyeo Association	Jeju	Jeju-si

Appendix II – 7 Tenets of Confucianism (Source: Baumann et al., 2019: 10)

<i>Confucian Tenet</i>	<i>Description</i>
Five Cardinal Relationships	The relationship between the ruler and minister, father and son, husband and wife, older and younger, brother and friend. In essence, the ‘junior’ member of each dyad “owes strong duty of service and reverence” to the senior, and the senior owes a “duty of care and benevolence” (Sun, 2008, p. 12; Phillipson, 2013).
Filial Piety	Primarily concerned with the ‘ideal child’, where there is an emphasis on respect for parents, elders, and ancestors. It also governs the relationship of people outside of the family unit, to include persons who are in positions of authority.
Virtuous Ethics <ul style="list-style-type: none"> • Benevolence • Propriety • Righteousness 	Each tenet mutually underpins one another, with the interplay supporting social stability. Benevolence (<i>ren</i>), propriety (<i>li</i>), and righteousness (<i>yi</i>) are concerned with the exercising virtuous ethics in one’s conduct including respect, reciprocity, selflessness, and genuine care for oneself and others.
Doctrine of the Mean (<i>Zhongyong</i>)	This emphasises taking a moderate path to finding the best solution between two conflicting positions. The goal is to maintain balance and harmony in all undertakings.
Mandate of Heaven	In ancient texts, this refers to the legitimacy of the kings’ right to rule over their subjects, where Heaven has blessed the king and given him absolute power to reign. Today, this manifests in an externalised locus of control where authority is obeyed.
Perfect Gentleman (<i>Junzi</i>)	The ‘exemplary man’ (and of course lady) is a status any man/woman can achieve by cultivating oneself, and following the paths described above. The <i>Junzi</i> rules by acting virtuously himself/herself, to inspire others by leading with example, and cultivating a lifelong passion for learning.
Continuous Learning (<i>Xue</i>)	A feature prominent to Confucianism is its commitment to study and learning. Historically, learning referred to the process beyond understanding and deliberating of academic study to include a pursuit of the ‘Way of Heaven’ through classics. Today, it is about transformation and betterment of the self through the continuous acquisition of knowledge.

Appendix III – Interview Notes

This appendix will have notes from the most conversations. Half of the conversations were not recorded but short notes were made while making observations when conversing with the interviewees. Followed by filling those notes, writing observations, and finally author's interpretation of them.

Note: Interviews 1 – 6 were done with the help of translating apps, or in English. Interviews 7 – 16 were done with the help of translators who helped in transcribing interviews in English.

1. Interview with Yu Kyong (Interview 2, 2023)

- Yu-Kyong moved here from Seoul 7 years ago and joined the haenyeo school in 2017. She didn't care much or seek to learn more before, but after UNESCO titled haenyeos as intangible cultural and heritage site in 2016, she came to read about it and joined the school.
- Now she is a senior haenyeo – sangoon.
- The younger haenyeo have calendar in their phone about the harvest.
- They know the right time when the species would've grown into the right sizes for harvesting, tomorrow they are picking the sea urchins only to clear the sea floor of them.
- Yu-Kyong moved to Jeju to give her children a better life in nature and away from the city.
- Status of haenyeos now:
 - o Yu-kyong told me that the older haenyeos are not poor now – this was emphasized on a lot. The women who are 75 y/o or older are given 300,000KWN by the government as pension. They also move into the shallower seas to harvest.
 - o Children are very proud of their mothers who are haenyeos. A strong sense of honor and leadership amongst the women to continue their work.
- Changes in work of haenyeos:
 - o The catchment has gone down, she was able to collect 50kg of conches before, now only 30kg.
 - o The waiting hours have increased for every day, before it would happen infrequently, but now they need to wait at least 2 hours before the conditions are right to harvest.
 - o As her other job of being a reporter she has been able to travel to other areas to harvest as well. The environmental concern in other parts are then observed by her. (refer to the interview done with her later)
- Her work:
 - o She was the only haenyeo that got accepted into the village after completing the school. All the other haenyeos in her group are thus older than her.
 - o “very difficult for new haenyeos to be accepted”
 - o She has had 2 jobs for 10 years. Haenyeo work starts at 5am and after lunch going to the city to do the reporter work until 4pm.
 - o Difficult to live this lifestyle and with the choices that she has made. She lives alone now as her children have gone to Seoul to continue their higher studies (Jeju is not seen as a place where ‘good’ higher education can be received) with her husband. She does not plan to move to the city but continue her work here.
 - o Her children came to visit during their vacation in front of me. And she had plans of going to the beach, library, and dinner plans with them.

- Working Conditions:
 - o Haenyeos groups have designated areas in the sea where they can harvest and they cannot work outside of that area.
 - Places of Knowledge Transmission:
 - o The skills of diving and harvesting are mostly learnt at the school where the older haenyeos are the instructors for harvesting and professional divers show how to dive.
- Buldteok – is also a space for knowledge transmission.

2. Focus Group (Interview 7, 2023)

- How is catching octopus, sea urchin, and other species different from other people?
 - o Haenyeo know the area where seafood lives
 - o For example, you may learn from a senior sea urchin or an octopus from experience. it depends on urchin, octopus, sea squirt (species) there is a special way to catch each species.
- How is it different from what big companies catch?
 - o Haenyeo know the area where seafood lives.
 - o For example, you may learn from a senior sea urchin or an octopus from experience. Freshness is better for haenyeo to catch. customer prefers the haenyeo catch since its a fresh catch. Conch and others cannot be caught by large companies. in case of octopus - big companies are using a weir (fish trap) a traditional tool useful to catch octopus, the conch cannot be caught by bigger companies, only can be caught by hand as its too weak (squigly). They produce sea cucumber in nursery instead of catching it since they cannot catch it also. in the market it makes more competitive with the haenyeos catch. (VP) said haenyeo strategically find the species with the knowledge that the companies don't have.
- Has the method of holding changed over time?
 - o The method of grasping is similar, but the equipment has changed to modern. swimming goggles and fins, and suit have changed overtime, depending on the species the original way of catching has been changing. Conch is caught by hands, urchin is used by breaking the spikes. and squirt is caught by poking the eye using the knife, abalone is caught using (bi-chang). Original way of catching has been learnt by the haenyeos and they pass this knowledge.
- Is it different by type?
 - o The method of grasping is similar, but the equipment has changed to modern. (ex) Sora (hand), sea urchin (fox), octopus (poke), sea cucumber (pick it up), abalone (rain spear).
- Can you tell me about your experience with haenyeo?
 - o I felt yearning through mass media (drama, documentary, etc.), so I lived in Jeju for a month and actually watched it and experienced Hansupul Haenyeo School. In Jeju people see haenyeos everywhere. (woman) - a haenyeo approached her with food to eat that was her first experience. people who live in the city are always curious about haenyeo so they are in Jeju for a month to experience the haenyeo life. Also the school is popular (last year the student failed and made it this year), (VP) - its a desire to become haenyeo that is respectful. other women said its more about curiosity rather than seeking anything else. another followed her friends. once they came here and learnt muljil, they really liked the experience however its getting harder once they learn more. they found that they cannot do muljil as a profession, but the

school gives the opportunity to experience and no compulsion in how much you catch. (livelihood)

- Can you share what you saw and learned from haenyeo school or haenyeo?
 - o One haenyeo takes charge of the members of the team, teaches them how to catch and peel, and also distinguishes between edible and non-eating. It also improves diving skills. woman - learnt how to breathe in the sea, catch and flip the rock. hold the rock without moving (breathing technique). another woman - using the floating tool (ho-maengi) keep swimming without stopping. (chuck) - any leader in the group?, woman - yes, there is who leads and organizes the harvest process. another woman - they learn directly in the sea, but more from observation of the haenyeos doing muljil. peeling urchin is also a technique learnt from haenyeo
- Have you ever been to the Haenyeo Museum? If so, would you have learned anything from the Haenyeo Museum?
 - o The Haenyeo Museum is a curriculum of Haenyeo School. Learning about the history of change, history, tools used in the past, etc. woman - one case is a group of haenyeo gathered money to build back a school that was destroyed from fire (how they contribute to the community through their earnings).
- Can haenyeo go into a village other than their own?
 - o Unable to enter because each village has its own area. They belong to each village's fishing community and sea guards. if the other village haenyeo comes to a different village, there are fights. there are written records of those fights.
- What do you think of the Fukushima discharge(release)? Do you have any participation or movement from haenyeo?
 - o Negative opinion prevails over Fukushima discharge. Restaurants and Japanese restaurants are worried a lot, and haenyeo are also difficult to find. Feeling similar to Chernobyl's case. We are planning to protest against the administration in Gwanghwamun. one organized group of haenyeos, no official organization within the school though.
- Are there different kinds of seafood collected in different villages?
 - o There is little difference in Jeju. there are 3 kinds of areas, Jeochan - Pyoseon - 1 area - most productive area, as the quantity of harvest is more Pyoseon - Halim - 2 area; Haalim - Jeochan - 3 area.

3. Interview with Ko (Interview 8, 2023)

- In August most of the species are making babies and that is why they stop harvesting during that time. Urchin is caught most during June and July, abalone and bol-sorang is also caught and stopped in August.
- How do they know the species are pregnant? No one told her (not her mother or grandmother since they are not haenyeos). They themselves saw the in the sea while harvesting how the size of the species they caught would grow slowly during July. They saw babies also getting released, they were also able to tell the size and the difference within the growth stages depending on how well they tasted. If they are bigger in size they would taste better. So they made the rule of not catching the species when they are pregnant and are in growing stages.
- Pul-sorang – June, July August stopped to harvest and start in September
- Song-gae June and July stopping
- 5 years ago she stopped working as a haenyeo

- At 17 years old she started swimming by herself and learning the ways of the sea by herself. At the age of 20 she started working as a haenyeo without learning by anyone. Her older sister was a haenyeo. She would go to Taeheung-Ri to swim and harvest and come back to the town after completing her work there (nostalgia). Every day she would go and work there. She would go in a group of 10 from Seon-San ri and work in Taeheung-Ri. (did they go everyday or specific months)
- They worked there because the prices there were more higher in Taeheung-Ri and they earned more in that town than in Seon-San (Jeju-si haenyeos earnings were lesser?)
- In Taeheung-Ri there was a company (that would buy their catch?) whereas here there was a captain (that put stamp??) their savings were more from the sale in Taeheung-Ri.
- Earnings in Taeheung-Ri – the person who was more skilled would earn more, the difference would be 5000-20,000KWN depending on how skilled and how much you could catch.
- 3 daughters and 2 sons and has 5 grandchildren
- Children
 - o Son – animal doctor
 - o His wife – professor in university
 - o She said now her job as a haenyeo is probably much lower in reputation and rank than her children (her skill is middle)
 - o She uses her money earned right now for her grandson – buying her bag and sends her money still as pocket money.
- Her sister is a restaurant owner in Jeju city
- A very proud family and a lot of pride in her children
- The land they are working on right now is her husband’s family’s (brother)
- She is a farmer, haenyeo, mother, wife, grandmother, (did she do any other work beside haenyeo?)
- She worked even when she was pregnant. First 4-5 months of pregnancy she would work!
- She has had operations in her knees, endography done also
- She said if she wasn’t sick she would still be working in the sea
- A lot of pride in her work and the will to do it
- Husband – he was very happy and proud about seeing her work.
- The catch would differentiate on every day, some days there would be a lot, some days there would be none. But mostly it depended on the skills of the woman.
- Any changes in the sea observed over her time in the work and life
 - There are much more typhoons, harsher waves, and stronger winds.
 - Dolphins come here and are still observed by the (guesthouse owner) (around what time do they see the dolphins?) does it differ
 - Last time guesthouse owner saw dolphins when haenyeos were working.
 - The haenyeos would communicate with the dolphins whenever too many women were working in the ocean and they would see that dolphins are passing by, the haenyeos would make the sound – pyalo pyalo– and then the dolphins would pass under the water (through low waters) rather than on surface where the women would be working. This was more for the safety of dolphins from the ships that would be passing by.

4. Interview with Yoo Jung (Interview 9, 2023)

- The reason she became Haenyeo
 - o At that time, to earn money, many women became a Haenyeo. (Same with her)
 - o She started working as a Haenyeo at 18. When she was younger, she followed her mom going 물질. Her mom was very good at it.
- Other works she did
 - o She just did some farm work. (Not for long) She mostly did 물질 to earn money.
- Reaction (community, friends...)
 - o At that time, being a haenyeo was common thing. → so everyone around her said her to do it. Because it's about earning money.
- Difference(area)
 - o She's been to mainland,
- Usage of money earned by 물질
 - o She mainly used her money to send her children to school(education).
 - o + living expenses, children's allowance. (Mostly used it for her children)
- Changes in places
 - o Before marriage: 온평
 - o After marriage: mainland(shortly), mostly in 신산리
- Dolphins
 - o She has seen dolphins. She told us that jeju haenyeos say "bae allae" or "mool allae" to the dolphins, which means "under the ship" , "under water" .
 - o When there are large ships passing by, and there are dolphins nearby, haenyeos tell them to go under the ship or under water to not get hurt.
 - o Since the dolphins regularly pass seas in jeju, haenyeos can often see them.
- Sea urchin
 - o When the sea urchin is broken, some fishes like "어랭이" gather to eat it (it likes sea urchin), so Haenyeos can catch the fish.
- Valuable knowledge you want to send
 - o Nothing in particular. She says when haenyeos go 물질, older haenyeos will teach and help the new ones when working together.
- Changes in eco system
 - o There was many 우미, 모자반 in the past, but not now. Even though a haenyeo who is not that skillful goes 물질, she could get lots of it in the past.
- Flipping rock
 - o Through experience, she can find each species related with the location.

5. Interview with Yu Kyong (2nd) (Interview 10, 2023)

- How does waiting for many hours/days to harvest affect daily life?
 - Waiting~~
 - It affects her life. Since she is working as a reporter, when it's delayed, it's hard for her to change or make a new schedule.
 - Affects her other job too. It can be cancelled or delayed often according to the weather.
- Haenam
 - o Dressing room problem (There are more women than men)
- Haenam was the beginning of Haenyeo.

- (During Japanese colonial era) Since the Japanese made men to labor, many men stopped working as Haenam. → So women started to work as Haenyeo. (Increased Haenyeo) → maintained until now.
- Since Haenyeo was treated with contempt + this awareness remained= Even though a man wants to be a Haenam, some people says why do you want to be it ??? (Saying badly that Haenyeo is not a good job for men)
- Fisherman & Haenyeo
 - The species they catch does not overlap. Fisherman: catch mainly with nets(mainly fish, octopus)
 - Haenyeo: dives underwater using their own tool
- Money earned
 - She did not earn much through 물질. (Her own experience) She thinks that compared to other jobs she did in the past ! → So she's saving her money earned by it.
 - However she wanted the money to be special to her and her children. Unlike other works, 물질 is dangerous as well as special (that's the reason) to her
 - Money earned through 물질 is similar throughout the year she worked as a Haenyeo. Because~ When before she was not skilled as now, there were a lot of seafoods in the past. → ironically, these days, even though she is skillful than before, there are less seafoods than the past → so it's similar
- Access to market
 - It doesn't matter with stopping 물질. If a typhoon comes, fisherman and Haenyeo both stop working. Also, species they catch is different. Although the Haenyeo stops 물질, they save some seafoods in their own water tank and sell it when they stop 물질(usually when they stop because of the breeding season). For example, in the breeding season of some species, they aren't allowed to catch it during the season. → The species are hard to get, it becomes expensive than other seasons. So some Haenyeo sell them (from their water tank).
 - Not catching the specific species in their breeding season does help the ecosystem in the sea. She has seen an octopus with eggs → she thinks when the egg hatches, there would be more octopuses in the sea.
- Breeding season
 - She doesn't know really well about it.
 - She heard that the octopus dies only living one year. Haesam(해삼) grows fast. (Heard from older 해녀)
- Flipping the rock
 - She does not flip any rocks underwater. Each species has characteristics.
 - For example, 해삼 is found mainly under rocks that are with sands under it. (They eat sands)
 - 전복 are gathered under smooth rocks.
 - They flip the rocks this way with their experience.
- Community
 - The Haenyeo community does not like to have a new member.
 - They cooperate in the same area → if there's many people, they get the small amount of share eventually.

- These days, some people try to become Haeyneo → but since it's a hard work, most of them quit early. → It makes other Haenyeos(who taught that person) feel bad. (Because of the attachment they gave....)
- But they treats new Haenyeos by teaching them while working. Also, they give some seafoods they caught to the new Haeyneo (new Haeyneo is not familiar with 물질 than others, so there will be small amount of seafood caught by the new Haenyeo)
- Changes in species
 - The changes are different in each sea. But she told us some examples she knows.
 - There were many 우뚝가사리 in the past around the island, now it's only remaining on 평대, 하도 (Because it grows in fresh environment) 모자반 now only grows on Gapado(island near 대정 in Jeju) , and 북촌 in jeju island. In the past it was easily found all over Jeju. Things learned from the older generation.
- She always heard about companions who are working together from the older generation. They told her that “we cannot live only by yourself. We are companions and we can save and care for each other”
- She says that that's the reason why she keeps checking others while 물질(especially older Haenyeos when they are sick that day)if they are alright.

6. Interview with Oliwia (Interview 11, 2023)

- She came from Poland to Korea to study in 2009 with scholarship.
- She came to know about the haenyeos 7 years ago. She had visited Jeju a lot over the last 10 years.
- She attended and graduated from Bhwo-pang haenyeo school.
- I started with asking her who was teaching about haenyeos and what the course involved.
 - The lectures are taken by older haenyeos, professors of different university (for the history), and professional divers.
 - The lectures given by the professors about the history of haenyeos would be very serious and specific.
 - However, lectures given by haenyeos would be given in a nonchalant manner since they have lived that life and thus do not go into much detail about their daily life.
 - Other professors taught?
 - They went to the museum where they met the Hansupul School people too for the first time.
 - From next year they will probably try to have both the schools interact more.
 - They had classes and went to practice in the sea 4/5 times for 2-3 hours.
 - The teaching would differ depending on the haenyeo teaching them.
 - One would tell them you just need to dive deeper and faster to collect the harvest. They would follow the traditional route of teaching where they never learnt how to equalize your ears and so they would tell their students there is no need to do it, as it would naturally happen. Older haenyeos have been able to naturally equalize without accessing their nose as they use the goggles itself to push their nose against and equalize.
 - Whereas other teachers would be patient in teaching and let the students take it slowly.

- Yu Kyung unnie took the class of how to get accepted in the village (she did all that)
 - Do things without anyone asking you to
 - Smile a lot
 - Be helpful
 - Be kind
 - Take on their culture and understanding completely
 - Unlearn what you know and be acceptable to their traditions
- After the graduation they will be interning in the village they have been living in. It is important that the haenyeos are already living in a village and are familiar with the area. Since they are assigned to that village itself, if you are coming from outside Jeju it can be difficult to be assigned to a village. You will have to spend some time already living in a village to be able to start the internship?
 - The internship will last for 3 months and you accompany the haenyeo assigned to you 8x to work.
 - You also have to catch \$1200 worth of catch in one year – you work 60 days usually in the year or less with the worsening weather conditions.
 - You build a relationship with this san-goon haenyeo and with the community you work in
 - However, to be able accepted as a haenyeo you have to be accepted by everyone in the group
 - The group size of every haenyeo group varies.
 - A lot of times they tell you haven't made it and they are direct about it.
 - Once you are a haenyeo you get a license. Without this license you are not considered an official haenyeo.
 - You cannot switch between the villages for internship, you only get one shot at one village.
- Harvesting has been very poor this season due to the rainy season – jang-min? season
- The multiple species in the sea is known by the haenyeo where to find. They will know about their village's sea where they regularly dive and work where the population of urchins, abalones, octopus, seaweed, etc. would be easier to find.
- It also varies with the depth of the sea, with deeper levels the species grow larger and bigger (due to the deep sea environment), whereas in shallow levels the size of (urchins) can be seen to be small. The depths of the sea are covered by the sang-goon haenyeos.
- Urchin – there are seasons when you will find the yolk inside and its edible, other than those seasons you may not find the yolk, or if you do its not edible. It is sweeter in certain seasons and is thus more valued then. In the other seasons either the yolk won't be there or will not be edible. Also since urchins as a huge population are bad for the sea environment since they feed on the living things, the haenyeos take them out in every season, either to eat or just to throw on the rock sides so they don't harm the sea life.
- Recently the jungmun haenyeo village discovered the new variant of the sea cucumber species they harvest, it looked more black/red than usual. They took this variant to the village head (male – also a fisherman) to ask whether it is edible and they can sell it.
- Harvest routine:

- Since they go into the sea early in the morning usually they do not eat before going into the sea (confirm)
- They usually don't right after their harvest also since they work in the sea for too long and are tired (eating times?)
- Daily diet?
- Haenyeo groups
 - Vary in numbers all over the island and in every village. Some villages have more haenyeo groups some have less or just 1.
 - Jungmun village has 6 members only and only group in the entire village. Not all haenyeo villages have restaurants but most do and this is seen as an asset of that village. The more assets in the village haenyeo the harder it is to get into it.
 - The haenyeo from that village work and take shifts in that restaurant
 - Oliwia says the smaller number of group members is kind of better as all need to accept her into the group, so it is lesser people to impress and get accepted by. However, it will also mean you have more time to build one-to-one interaction and get closer to each haenyeo.
 - The older women speak normal Korean with a heavy accent with effort though, so they usually after a while just get tired of speaking
 - New haenyeos joining in (Identity – Community data)
 - There is competitive atmosphere when harvesting, the better you are the more you can gather.
 - The money is split between the haenyeos according to their sale and catch
 - The more haenyeos there are the more the money will be split, thus newer haenyeos are not very welcomed into the village.
 - The responsibility of the new bee haenyeo
 - Let go of the culture and knowledge you know completely
 - Dive into the culture of the haenyeos completely and become part of it
 - Learn the jejuan language to better communicate with them (the new students that are in the hansupul school do not know the language and thus do not communicate to the older haenyeos directly much)
- The folklore songs are the same – has the same melody and the lyrics overall, just the name of the village changes depending on haenyeos and from which village they are.
- Oliwia went to this school where only older haenyeos go and practice the song and dance that they have to perform – these performances are done on individual village performance taking place, when there is a haenyeo festival taking place and other villages haenyeos come together and perform and compete also. But oliwia went to the school thinking that all haenyeos can take part in the classes which wasn't the case. But since she came into the class they asked her to join in the dance performance.
 - Festivals:
 - Hairtail fish festival – October
 - Seog-wipo festival village
- Haenyeo Village – village differences
 - The seafood culture varies
 - Shamanism culture also varies
 - Since some praise the sea god, some sea goddess, not taught in school but on the trip to the museum they saw it.
 - Songs also vary in that sense with the name of the village and what seafood they are more popular to catch.

- School (Beowipo?)
 - o The school doesn't allow haenam to join in unlike hansupul school
 - o The age limit of joining the school is 55 years old- need to be from Jeju or living there (but many women commute back and forth in hansupul since the classes only take place on the weekends, some live in the dorms)
 - o The classes taught
 - When the word haenyeo was found and recorded for the first time in history
 - Why the men left the jobs of haenyeos and it became prominently led by women
 - Men used to carry variety of species before and women used to catch just seaweed before and make most of their earnings (but now seaweed cannot make up for the living expenses – also bought cheaper in other places than from haenyeos)
 - Men took on alternative jobs as this was looked down upon
 - April 3rd tragedy that took place in Jeju ([research on it](#))
 - The job was more shamefully looked at until UNESCO titled it in 2016
 - Men however liked having women working as haenyeos as they would work a lot, not just in the sea, but alternative jobs and taking care of the house work as well.
 - The haenyeos also have songs about their husbands that they sing as part of the folklore.
 - o If anything she thought could be added to the school?
 - Learning the folk songs
 - Making your own taewak (it is part of the hansupul school)
- Books recommended: Island of the sea women – Lisa
- Oliwia and I discussed the day that I went with Yu Kyong unnie to the bulteok and saw them work and how the older women had each other at this age to talk to and share each other's company.
 - o We discussed how this might be the reason that they live so long
 - o They also work as long as they live and this is possible due to the community
 - o After retirement at 70 – they get \$500/ month
 - o Pension for 3 years?
 - o They get hospital insurance and other benefits if they have the haenyeo license
 - o All these benefits didn't exist all along, came from a certain time (can we know exactly when).
- Women community:
 - o Complex and difficult to navigate
 - o Have many conflicts within them, and also between each other from time to time
 - o The haenyeo head is usually a woman – the oldest that is voted within themselves. She doesn't change or voting doesn't take place until she passes away or retires. No time period for the vote
 - o The village head is usually a male that is born and brought up in the village itself (sae-k-tal) does bring the patriarchal side of the culture into the haenyeos work culture.
- Fukushima and protests
 - o People's opinion about the harvest is hard to change.
 - o It is not about questioning whether the discharged water is actually clean or not, they take the word of the government? It is about the public opinion.
 - o Are there tests being done to check if it is clean? Is anyone asking for it?

- The effects of it will be seen after years and not immediately, thus the concern doesn't become huge for the non-haenyeos
- Market
 - 수협 bank that supports the fisher villages
 - Need to make an entrance fee to enter a haenyeo village
 - The more assets the fishing village has the higher the entrance fee is
 - This is seen as an insurance thing by the group, as the group has been working for years to collect the assets they have and the earnings from it will be split between everyone even the newcomers. So they need to invest a bit into the assets to share the profits equally amongst themselves.
 - If there is more population of species in a certain village, then also the fee amount increases as they are earning a lot more.
 - The bank provides insurance schemes to the haenyeos as they make their bank account before starting the muljil. In the bank you need to also put some amount of money (\$7000?)
 - Beobhwan village asks for \$5000 as entrance fee – this fee goes to the haenyeo pool itself and is used by the group in their assets and profits division.
 - The older haenyeos have their life earnings that are part of the pool thus to get into that pool, the entrance fee becomes a requirement.
 - Younger haenyeos also use SNS to sell their produce by using it as a marketing strategy.
- Benefits:
 - If you are a haenyeo under 40 years old then you get \$500/month for the first 3 years of work.
 - The bank gives high prices for the harvest collected by the haenyeos
 - Sellers and buyers are connected with the bank and they are the ones the haenyeos usually sell their catch to.
 - Once they decide to sell their catch that seller, its hard to sell your individual catch to someone else.
 - Some store the catch in the sea itself nearby their restaurants (seen in Seongsan-ri) to use in their cooking fresh and in non-harvest seasons.
 - Sea is used as a natural freezer and personal aquarium
 - Not much freedom to sell their catch to different buyers and sample is given to the seller
 - Prices of the catch varies from village to village so in some it could be sold at higher prices while in others lower.
- Sea species:
 - Example – urchin are sweeter and better in some coastlines than others so the price would be higher there.
 - Sea snails babies are thrown in the sea to grow in 5 years
 - Abalone babies – are harvested beginning of July – also grown artificially in aquaculture farms.
- Changes in traditions:
 - Equalizing training given to the new haenyeos – is questioned by the older haenyeos as they never learnt to do it, but just naturally equalize in the sea itself.
 - Masks used make the nose inaccessible so equalizing is harder. That is why they asked to change the masks used which the older haenyeos are very against.
 - They just put their nose against the round mask and equalize their nose and ears.
 - There is also the conflict of changing the masks and its color that is not orange as the older haenyeos are used to using it.

- The younger haenyeos are more about changing the equipment and making it easier to muljil without risking more than they should, which is not accepted by the older haenyeos.
- Aquaculture and artificially grown species is disliked by the community
 - Seaweed – miyok used to be the main source of their income in the past, however artificial farms have taken over the production that uses seawater. They grow in massive scales and sell cheaper than the prices sold by haenyeos. Thus, the consumers buy cheaper from the aquaculture farms.
 - Abalone grown artificially is smaller in size than the size that the haenyeo catches it in the deeper parts of the sea as they grow well and more in deeper seas.
- There are conflicts between the haenyeos working in the sea and the ships that are present in the sea at the same time, as to who can work in that space as both cannot together due to safety reasons.
- 3-4 villages use boats to take the haenyeos to the deeper parts of the sea.

7. Interview with Yoo Jung (anonymous) (Interview 15, 2023)

- Reason she became Haenyeo
 - She is still working as a Haenyeo(the head of Jeju Haenyeo institution as well as the head of 동일리 fishing village)
 - She became a haenyeo because it was a natural thing to do since at that time, many people were poor. Also, she lived near the sea when she was young.
- Other jobs
 - Just farm works (starting from 24, after marriage)
 - Started 물질 from 18
- Reaction
 - It was natural for women to be a Haenyeo, so there was no reaction particular.
- Place she did 물질
 - 하모1리, 동일리
- Dolphins
 - She met dolphins many times.
 - She spoke “mul allae” “Bae allae” too.
- Changes (past&present)
 - Eco system of the sea (getting worse) → Less seafood to catch
- Ways to catch each seafood
 - 소라 : go far from the shore
 - 성계: near the shore
 - She says she can mainly see each seafood there (according to her 물질 place, 동일리)
- Money spent
 - Children’s education, living expense
- Fishing village (어촌계)
 - Anyone cannot join easily.
 - You have to live in Jeju for about 1~2 years, needs to be skillful,
- Thoughts about new Haenyeos
 - She feels pity about them.
 - Because 물질 is tough work to do.

- No benefits from the government
 - o Money earned (past & present)
- Past: mostly caught 소라 and 전복. Now: mostly 성게
- She says the highest paid seafood a year. → these days, since many people consume and like 성게, her fishing village are mainly catching 성게

8. Interview with Haenam (Interview 16, 2023)

- How did he knew about being a Haenam ?
 - o I became a haenam naturally because i live in Marado. Most of the women on my father's side, cousin, aunt, and my mom work as a haenyeo. So I came up with a thought that "should I try it?" First, I began with curiosity. I didn't think it as making a job. I just tried it when I was near graduation from college (the department of business administration). My aunt asked me if I would like to try it. I think the satisfaction is really huge since my hobby (spear fishing) and job fits perfectly. I received a haenyeo card in December 2018.
- How did he start learning ?
 - o I learned how to spear fish from my aunt. My aunt is a haenyeo who dives deeply. Haenyeos are divided into 3 levels. Sang goon(highest level), Joong gun , and Hagoon(lowest level), and my aunt is Sanggun. Since Marado's sea is much deeper than Jeju Island, it is said that even if you are sang goon in Jeju Island, you will become ha goon if you do 물질을 in Marado. I told her to teach me because I felt that she was cool when she was diving deeply. Auntie said you should enlighten yourself because if she teaches me something, it will be my limit. She only gave me some simple tips on where to find seafood. I learned the part about diving by myself.
 - o I used to enjoy spear phishing, and since this is a bit related to haenyeo, I naturally had fun. People talk about Haenyeo as a honorable job these days, and they say that haenyeos went on a path that no one has chosen. But i don't feel big responsibility for this. Of course i am thankful to hear people around me say that, but at first, I just started doing it because my hobby and making money matched well. These days, I feel some responsibility.
- 자신감
 - o Confidence grows faster than you think. Since Haenam is rare, people around me compliment me a lot. But I didn't know at the time how toxic the compliment was to 물질. Marado abalone is larger than other regions. And it usually takes about a year for a new haenyeo to catch abalone, but I caught it in about three months and gained much confidence. However, few months later, I saw an abalone while catching a 소라, so I put it down and went to catch the abalone. I made this choice because abalones are paid much more. But I couldn't pick it up as I wanted because I was in a hurry. Then I fainted in the water. Fortunately, my aunt found me. Through this experience, my confidence got broken. I got a lesson that too much confidence can harm me. In addition, thinking humbly about myself, and stop being greedy is important.
- Part of a haenyeo village?
 - o He is a part of haenyeo village also.
 - o There is a haenyeo card given to haenyeo or Haenam in the province, and you must belong to the fishing community to receive it. Because the benefits of the card are so good (the benefits are operated with taxes paid by provincial residents, such as free treatment at hospitals if they get sick due to diving), the

procedure is very strict to prevent abuse. In the past, Haenams did not get a haenyeo card because they were literally not a haenyeo, but between 2017~2018, when there were many issues related to gender equality between men and women, the opinion of Haenam to treat them the same as haenyeo was accepted.

- There's one fishing village in Marado, and my family already belongs there, so I joined there easily than others. Also, I once appeared on a TV, and after seeing me on TV, a boy from Daegu who was interested in Haenam came to meet me. Then I tried to put him in another fishing village, but they all refused. Since there are already many haenyeos, it is said that they are not likely to include a new member in their community, not only men but also women too. (Since the new member quits quickly) Especially, for the new man member, this is because there are dressing rooms and facilities only for women. Therefore, it is very difficult for Haenam to enter the fishing community. Even if a haenam joined the village, the Haenyeo Association does not accept it easily.
- License
 - If you want to be a haenyeo, you should visit the haenyeo association first. Then you have to pay the admission fee there. After that, they usually watch you for a year or two, looking at how good you are at 물질, and how well you will fit in this community. After that, if they think you're okay, the Haenyeo Association will allow you.(stamp a seal) Then, a seal must be obtained from the chief of the fishing village. And you have to visit Seogwipo Suhyp and write down the results of what seafood you caught and how much you sold over the year. If you receive a seal at there, and take it to the provincial government, the screening begins. Someone will unexpectedly check whether you are really doing 물질. If confirmed, the governor's seal will be stamped. It takes about three years on average to pass all through it, and I also went through this procedure and became a Haenam.
 - 물질 must be done together. For example, if there are total five people to 물질, and only three people do it without two people, these two people will be excluded from the work and will not receive certain amount of money that was earned that day. Since people paid 1 million won together to buy 소라 and sprinkle it on the sea, and they raise it and catch it. If someone's joining is inevitable, the rest goes 물질 in the place where the bought 소라 is not sprinkled. Since Marado is a family, it doesn't matter to do 물질 alone, but the rules of other regions are like this.
- Women's dressing room, etc
 - Haenam has been making suggestions for a long time, but it is difficult to change them practically. This is because if you set up a men's changing room or bathroom in one place, people from other regions will ask to do it for them too. Therefore, all Haenam live near the sea, so they go home to use bathroom or change their clothes. I have a house in Marado, and since it is a very small island, I go home quickly and use it.
- Fishing village
 - The person who owns a boat, the person who runs a sushi restaurant, and the person who lives there are all in fishing villages. There is a haenyeo association inside the fishing village. There are seven female divers in the Marado fishing village, and five of them are from my own family.

- What haenyeo care about most is sales performance, and they send documents to City Hall every year. If this document is omitted or manipulated, the haenyeo card will be suspended.
- The fishing community is an individual concept. Jeju City Hall manages each neighborhood. For example, Gapa Fishing Village, Daejeong Fishing Village, and Mara Fishing Village are all individual. Sometimes, the regions are combined to form one fishing village, and in this case, it is said that the number of haenyeo is too small.
- Space to 물질
 - As you get older, you go to the shallow sea. Therefore, sang goon haenyeos or young haenyeos do not catch seafood in the shallow sea. The younger you are, the deeper you go, and Marado's sea is about 20m deep. If I become a grandfather one day, I'll go somewhere shallow. There's a cycle.
- Haenam
 - Do you know other Haenam?
 - I know two or three people. We share inconveniences about our 물질 life. Every haenam lives near the beach, so the situation is similar to mine. Therefore, the minimum condition for becoming Haenam is to live near the sea.
 - Haenyeo do not necessarily hate Haenam. They like them because they can easily lift heavy things.
 - There were many men around me who were interested in Haenam's high income. If you work really hard, you can earn other people's annual income in a month (I earn much better than Jeju because Marado Island is rich in seafood.)
 - About 20 people were interested and I took them to the sea and watched them for a few days, and most of them gave up quickly because they are tired. While watching, I watch for parts such as diving skills, if the person fears water, and patience. This is because these parts are important later on as he engages in teamwork and community activities in the village. One of them did well and now he is doing 물질 in Dodu-dong.
- History of Haenam
 - I heard that it was from the Joseon Dynasty that it was recorded. There was a person who caught and sold abalone called "po-jaack-in". At that time, it was a dangerous job because there were no proper equipments. Most of them were men, but they died or just the number decreased. Women were lower in status than men, so women gradually took charge of the work and became haenyeo. Worldwide, most fishing activities are handled by men. One of the reasons why haenyeo became known worldwide (UNESCO) is that women because they worked at the sea. It is a job created from a painful history that women had no choice but to do because a man did not. However, through the profession of haenyeo, haenyeo culture, which is a culture only for women whose job is haenyeo, was created. For example, if a haenyeo with a young baby has to go to the 물질, there is a culture that several haenyeos taking turns 물질, baby sitting or breast feeding, the baby near the fireplace they rest. In the past, there were many haenyeo in the haenyeo association, and it is said that they were much closer to each other than now. Also, at that time, when men took the role of bringing the seafood that is caught by haenyeos, and selling it. Jeju has much more myths about goddesses than god, especially compared to other regions. This is maybe because women became the mainstream in the livelihood and had a great influence on living ability.

- A Haenam man in Dodu-dong I've told u before, who is now a Haenam, learned 물질 from me. Haenam/Haenam don't trust haenyeo schools that much. It seems to teach 물질 at the level of hobby. It is said that most of the students are having a hard time because they suddenly do 물질 in the deep sea while learning in the shallow and flat sea at school. Therefore, even if the student gets a job at and become a haenyeo, many people quit quickly. Since this situation occurs frequently, those who have already been doing haenyeo for a long time got hurt by giving them some help and affection. Therefore, most of them say that when a new haenyeo join's their village, they keep distance for a certain period of time.
- seafood sales
 - In Jeju Island, seafoods are usually bought by Suhyup or fishing villages. However, but there are not many ships to carry seafood. And since Marado Island has many tourists, most of the seafood is consumed inside it.
 - In Jeju Island, for example, if a haenyeo sells conch for 3,500 won, a seller sells conch for about 7,000 won to a sushi restaurant in the middle. When sold to customers at a sushi restaurant, it suddenly becomes expensive at around 12,000 won. However, in Marado, you can eat the same amount of seafood much cheaper than in Jeju Island.
- day off(In marado)
 - There are days when you can't do 물질 every month. When the difference between the tides is the smallest, the current is weak, making it easy to work. However, if the current is strong, it is difficult to work. In Marado, the current is weak for 15 days, and the remaining 15 days are strong, so we work 15 days and rest 15 days.
- Reproductive period
 - July~september: 소라
 - So we cannot catch 소라. Instead we catch 성게.
 - When we see 성게 having their baby, we catch 소라 instead.
 - In spring we catch 미역.
 - It circulates this way.
- The captain haenyeo should know how to see the weather and where the tide flows. My aunt is nearing retirement age, so I'm taking that lesson from her now.
- Women's status at Home

Since most women are in charge of 물질 in our house, they are also argue their opinions strongly at home. Because they do economic activities mostly
- I didn't have a sense of responsibility that I had to carry on with this to the next generation because it was a job that I started with a light heart. However, when i got to know the number of haenyeo would be one-fifth in 10 years, my thought changed. Looking at the age range of haenyeo now, most haenyeos have a high age group. This is because people in their 70s still do materials. I felt a problem with it, but I thought it is practically difficult to increase the number of haenyeo. Even though it is now a heritage listed by UNESCO , the support for practical expansion is minimal. For example, new haenyeos get 300,000 won a month for three years. However, it is not economically enough for them to be only haenyeo as a job. As I said, Marado has a very good income. Jeju haenyeos will not be able to earn well because there are very few seafood in Jeju Island compared than the past. In addition, in order to become a haenyeo or Haenam, the fishing community must accept

it, but the process is also difficult, so it is more difficult to increase the number of haenyeo in reality.

- Encouragement, other jobs
 - There was no encouragement to do Haenam at home. And i don't do anything other than Haenam because i have a high income. I just sometimes help my mother with her restaurant work.
- Pray
 - I don't pray on a specific or regular date. It's just that if i go 물질을 on a day when i'm not in good condition, i go to pray for comfort.
- Reaction
 - Everyone around me celebrates me on becoming a haenam. Because i started by my own will, and it matched my interest. Also, I earn lots of money.
- knowledge about the sea
 - Don't catch too small and young seafood, but let go, and catch big seafood.

Appendix IV - Harvest Calendar

4.1 In Haenyeo Museum Booklets (doesn't tell village specific)

- Muljil period:
 - Between January – April, hijiki, sea mustard, and conch shells are collected.
 - Agar is the main sea crop for May.
 - From June – August – urchins, and not allowed to pick conch shells
 - August – resume diving to catch conch shells and abalones

4.2 As Reiterated in Interviews: -

- Oliwia:
 - Abalone babies are harvested beginning of July
 - Example – urchin are sweeter and better in some coastlines than others so the price would be higher there.
- Haenam:
 - July~september: 소라
 - So we cannot catch 소라. Instead we catch 성게.
 - When we see 성게 having their baby, we catch 소라 instead.
 - In spring we catch 미역.
 - It circulates this way.
- Yoo Jung:
 - Ways to catch each seafood
 - 소라 : go far from the shore
 - 성게: near the shore
 - She says she can mainly see each seafood there (according to her 물질 place, 동일리)
- Yu-Kyong:
 - She doesn't know really well about it.
 - She heard that the octopus dies only living one year. Haesam(해삼) grows fast. (Heard from older 해녀)
- Ko:
 - Urchin is caught most during June and July, abalone and bol-sorang is also caught and stopped in August.

Appendix V - Observation notes from Participatory Observation

5.1 Observation notes from Sinsan-ri

- Younger haenyeos start with cleaning the floor and throwing away the trash without being asked they do this and make sure the lights, AC, thermostat all are working and turned off when they leave.
- Yu-kyong was the first one to arrive and clean the area where the other haenyeos were going to sit.
- There are 45 haenyeos that are divided in groups across the sea dock. All of them today went into the sea to do the same thing (catch and throw the urchins).
- Yu-kyong has worked with different haenyeo groups in the different villages. In 4 months they are taught in the school about diving a systematic way (of learning). And whatever is not learnt – about the specific sea that they will work in, with the women and everything they learn in their respective villages during their internships.
- These villages have older women that have learnt the skills from their mother/ sister/ grandmother/ mother-in-law over the years and are far more experienced.
- These gaps are filled differently in every village as sea is different in every place as Yu-kyong tells me. Also the needs of every village are different as they depend on the village and their waterscape.
- One of the younger haenyeo working today is the daughter of a older haenyeo and she is also similar age as Yu-kyong. But I did not interact with her at all. Completely opposite of Yu-kyong in the sense of invitation for conversations and opening up.
- After we arrived back home we went out for lunch in one of the restaurants where Yu-kyong was a regular. The soup I had yesterday for dinner at her place she told me they (haenyeos) sell that product (leaves) to the restaurant here to make the soup. The haenyeos sometimes go to the market to sell their harvest, usually a collector is assigned/group comes (from jeju-si) to buy it.

Voice note-

- We came to the buldteok at 5:20AM and first ones to arrive.
- Yu-kyong saw that the waves were very high and said that we will go home and wait for others, but others joined in and we stayed.
- Older haenyeos were surprised to see me and Yu-kyong introduced me to them.
- We all waited inside the buldteok to wait for the waves to calm and reside before they could go harvest.
- As we were waiting, one by one every woman was surprised to see me, what I was doing, where I was from, and why I was here. They were very welcoming – smiled and nodded
- They discussed about the tides being very high and harsh to go in
- It seemed normal to come in and talk about such issues while you waited a few hours for the tides to reside.
- The women have been working together for years so they consider each other to be family and discuss issues about their family, friends, work, life, and everything else like a family.
- They would come in and start talking in a cacophony of voices.
- Some of them live alone as well and this is the only family that they meet consistently in the village to talk about their problems.
- 89y/o woman – her children help her in the farming, she was not able to get cheap fertilizer because she is a haenyeo and not a farmer (as considered in the society).

- They have group communication with the other haenyeos and this calendar doesn't change a lot but mostly remains the same and moves a bit according to the lunar calendar.
- There was a karaoke space in the buldteok for days when the wait time is longer, the floor is made of wood and thermostat is activated when it's too cold in winter.
- Stitching their holes in the diving suits, 89y/o stitching her gloves, some were told to make cuts in their suit because it was too hot and too high.
- They discussed at length about their ailments, would lie down and take a nap.
- Some own mandarin farms.
- When the water had calmed down a bit they started changing into their diving gear. The older women would get some help from the younger ones to wear the diving suit.
- They asked me if I wanted to stay in the buldteok since it was too hot, and when I said I'd come they told me to change the shoes and they all had bought the same shoes and
- Everyone was walking towards the dock, where no one waits for anyone and everyone does things in their own pace. They want to remain independent while working so they all do their thing.
- They are 100m away from the dock and they dive into the sea. They spread themselves horizontally across the water and are going to dive and work for 1-2 hours, which is lesser but because the tides are very high and they entered the water late it's less. Usually it's 4-5 hours.
- It's observed how much everyone is able to get – urchins, determining their level of skills.

5.2 Observations notes from Hansupul School visits: -

5.2.1 Participatory Ethnographic Experience of Muljil

I left my house and picked up by Chuck (translator) from Jeju-si where we were planning to meet the students at the Hansupul school and do interviews. I got to know on my ride there that I will be diving and learning the skill with the students as they will be practicing today. He said we should arrive early and how the best way to know what it is and how it's done is to do it yourself. After arriving there we were met by the Vice President of the school (man) and the some students who lent me a swim suit, the mask, fins, and the student drove me to the diving spot.

When we arrived to the school there was a swimming competition was taking place and that was happening between the hansupul school students and non-students. at the diving spot there were a few haenyeos waiting for the students who are in advanced class to go dive and learn from the haenyeos the skill of diving and catching the harvest. They helped me wear the equipment and told me to change my shoes so that I don't slip while walking on the rocks. Some liquid cleaner was given to clean the goggles and not have them fogged up (different from the leaves that the haenyeo had used to clean their goggles in Sinsan-ri) - knowledge. But I was not wearing the stone belt, the ajummas were wearing the stone belts already. Before going into the sea, a haenyeo was holding a sea urchin that she broke in half and she scooped out the yolk? With her fingers and fed me twice. It tasted salty and liquidy in texture. But she directly put it in my mouth and she did it so naturally, like an everyday practice as if she is taking something from her own home.- food- We went into

They gave me a taevak and I followed the haenyeo in the water. She told me to look under the water while we swam deeper into the water. She said I was good at swimming using the taevak. She first told me to the tools we were using- taevak, multeok, knife? And she told me

to watch her dive. She went head-first into the water and told me to do the same. Then she dove in the water and flipped the rocks to find the sea catch that she wanted. She told me to dive in the water and it slowly and take longer breaths in between. She saw me running out of breath as I dove in multiple times and to do it slowly. As I started to look into the water and swim towards the ground, she said I was doing well. We went into the water and saw the urchin she found after flipping the rock and using kakuri (knife) important for using in between the rocks. She stabbed the urchin once and took it out super fast from the water after which the urchin would shrink in itself and squish in itself like a scrunch ball. She said its under or between the rocks and I have to flip it or find it in between and catch the urchin. - knowledge

She saw that I was not able to dive deep and stay there for long enough. So she took her stone belt and put it on me. Once the stone belt was put on me, it was super hard to stay afloat and keep on swimming. But it became easier to dive in and swim near the surface. However, to come back up and swim on the surface became much much harder! Because I was constantly swimming with so much more weight. The haenyeo was not able to dive deeper and stay longer at the bottom as she didn't have the belt anymore. She pointed out to me where the sea urchin was and told me to take it. it was quite invisible to me at first and I was only able to see it after a few seconds. Once I tried to get it using kakuri, I stabbed it too many since it wouldn't latch on completely to the kakuri for me to take. As I poked it so many times there would be yellow clouds that would be released by the urchin and it would shrink back even more into the rocks making it harder to reach it. she told me not to poke it too many times as it will be afraid, move further away, or get hurt in the process losing their yolk also. So you have to poke/stab it once and take it out using the left hand super quick.- knowledge I was wearing gloves to do this as the urchins are stingy to touch due to their pokiness. It was hard to poke it and take it by the other hand, however it was difficult to do both fast underwater. The haenyeo broke open the urchin in the sea and the fish came to feed from it, she knew exactly where the fish would come and take it. it was difficult to see underwater for me because the goggles would get foggy or even if cleaned was not clear. But she was able to see the fish and took the half broken urchin towards them, a lot more fish came towards her. She gave the other half to me to feed but no fish came and ate it from me. Knowledge - Then she started catching other species, she caught the octopus under the rock super fast that I couldn't even see how she did it. in her hands the octopus was moving so much as well but she didn't let go. The other haenyeos would come and ask who I am, and everyone would come and introduce themselves.

To dive she told me to have my neck straight and be careful of the rock, she told me to be confident when catching the sea harvest. The waves got stronger after some time and we moved closer to the dock to catch and practice. I would keep on losing the taevak whenever I would dive in and come back, she would bring the taevak back to me. When the haenyeo saw me getting tired, she told me to rest my head on the taevak and catch my breath. There were whistling sounds also that I heard when the haenyeos would come out of the water.

She left for home after less than 2 hours and there were other students who continued practicing at the shore. When the haenyeo showed me how to dive and catch the sea urchin/octopus/ seaweed I would have to at least come out 3x and she would stay in the water all that while. She knew exactly where the catch was and how to efficiently take it out. - knowledge

While leaving she took the stone belt after which I felt much lighter and found it easier to swim, I also felt a bit more confident in flipping the rocks (after she left, it felt unmovable when she was there). I flipped the rocks and they felt much lighter than what I had imagined and found an urchin in between the rocks, instead of poking a lot I just reached it out with my hand and pulled the urchin out. It was slippery to touch and took a couple of tries to pull it out and place it in the taevak. – knowledge The waves of the ocean were pulling and

pushing me around, swimming in a certain direction wouldn't work as the waves would push me around.

After the haenyeos left the students seemed more relaxed and enjoy swimming in the sea. After some time the vice president called us back on the shore, him and Chuck asked me whether I want to stay in the water for longer or go back out. (Chuck had later told me that although he wanted me back on the shore sooner, the Vice President had stopped him and told to let me be in the water for longer). I said I'd like to come back to the shore to move on to interviewing the haenyeos.

My taevak switched with someone as I had a lot of catch in my taevak. Yu-rim saw the urchins in the taevak and was like "oh no you can't take that out, you have to put it back in the ocean" – she threw the urchins in between the rocks in the sea. It's super important and consciousness is there even in the students about what is being caught for practice and how it needs to be returned.- knowledge.

5.2.2 Participatory observation of a class attended

I went to Hansupul school where the students had a class on how to make their taevak. When I entered the classroom some people saw with recognition, while most of them had not seen me the last weekend. So, they asked me who I was looking for. I asked around for Yu Rim's friend Mari, who spoke English and sat me down next to her. She told she had missed the last class and was thus trying to catch up on making the taevak. There were older haenyeos present in the classroom (approximately 12?) that were helping the students in making their taevak. Most students had handed over their taevak to these elder women towards the end as it seemed harder to finish making it oneself. The haenyeos were tying up the taevaks strongly and burning the ends of the rope. As they did a practicing to be a haenam/chef had cooked pumpkin soup, pasta, dumpling? With side bread and everyone was asked to have the food. This was cooked using the catch of the haenyeos and everyone was highly appreciative of what he had made for the day. The students brought the food for the older haenyeos and fed them by hand repetitively (common respect), one of the haenam students also brought in food for me. It is very common that the guest is told to try and eat everything and they make more room for them. There were 4 men present in the room and all of them were training to be haenams, but they were also more in charge of serving the food, helping others out with their work, any needs of the older haenyeos.

When I asked the students about their motive of becoming haenyeo, some had joined right now for the experience itself (most of the male students and some female students also). One student replied that currently they were working other jobs, some students were in the middle of jobs and had decided to join the school for 4 months. They were inclined on thinking seriously about becoming a haenyeo in their 30s or 40s. I asked the student about the process of getting accepted and the rules of becoming a haenyeo, some of them were not aware of it in detail. The male student was more aware of it. The students also didn't have long or any conversations with the older haenyeos. Usually due to the dialect difference which is more of a language difference I don't think students mingle much with the haenyeos. The haenyeos seemed happy to be helping out the students in making their taevak and took their leave soon after the class ended.

The younger generation at school that I talked to today was also not very aware of the protest that haenyeos took part in and where exactly it took place.

Appendix VI – General Preliminary Questions

Notes: This list consists of preliminary questions only, though they were followed by probing questions depending on the interviewee's responses (not recorded here).

Asked to older haenyeos –

- Did you choose to be haenyeo?
- If yes, why did you choose to pursue this work? (was always a yes)
- When and for how long did you do this work for?
- How did people around you react to your work?
- Did you always work here?
- Where are you from?
- What was the reaction of people around you?
- What old practices are no longer followed?
- What did you use your earned money for?

Asked to younger haenyeos –

- How did you hear about haenyeos first?
- Where are you from?
- What are your learnings of haenyeo work?
- What learnings were specifically known through schools? And which were taught by older haenyeos?
- Are you working? What other jobs do you do?
- What was the reaction of the people around you?

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