

## **University of Dundee**

#### **DOCTOR OF PHILOSOPHY**

Sense of place visualization for the whaling station remains of South Georgia Island

Smith, Scott L.

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# Sense of Place Visualization for the Whaling Station Remains of South Georgia Island

Scott L. Smith

University of Dundee

February 2018

# Sense of Place Visualization for the Whaling Station Remains of South Georgia Island

#### Scott L. Smith

This exegetical text is submitted in partial fulfilment of the requirements for the degree of Doctor of Philosophy, considered with the accompanying exhibition, it represents a textual thesis equivalent.

University of Dundee

February 2018

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Declaration

The candidate, Scott L. Smith, is the author of this thesis.

Unless otherwise stated, all references cited have been consulted by the candidate.

The work of which this thesis is a record has been done by the candidate and it has not been previously accepted for a higher degree.

Scott L. Smith

February 2018

#### Summary

The art practice of this PhD seeks to promote understanding of the historical context and cultural heritage of the whaling industry of South Georgia Island through a gallery based exhibition of a combination of digital art, olfactory installation, and theatrical performance concerning South Georgia whaling. These representations aim toward a gestalt effect that is complementary to existing representations and accounts of South Georgia. Performative methods aim to reveal a reflexive relationship between the phenomenological experiences of forming a sense of place and how we interact with the world.

The research investigates sense of place visualization for the shore-based industrial whaling station remains of South Georgia Island from a phenomenological position. The whaling stations on South Georgia were in operation from 1904 to 1965 before being abandoned, and at times these stations were the epicentre of commercial whaling in the sub-Antarctic and Antarctic. Relatively infrequent visitors to the island largely consists of tourists, military, and scientific personnel—the island has no native or permanent population. The area is remote and possesses a unique sensitive environment regarding native flora and fauna, making mass tourism highly unlikely.

Inherent in this research is a focus on how representation and visualization—often as memory—reflexively coincide and especially on how this relationship establishes the foundation for technological evocation of embodied virtual experience.

This thesis contributes a deeper understanding of sense of place visualization through practice by delivering spatial and sensory information that promote empiricist understandings of time, locational information, spatiality, and sensory derived material characteristics involved in place. This information is then bound with cognitive information originating with the visitor as well as that delivered by exhibits that function as narrative transmissions of constructed cultural understandings of place. A reflexive and reflective aspect is identified as promotion of critical metacognitive visualization, which fosters understanding of individual sense of place formation with an emphasis on embodiment.

These categories of approach mix within the exhibition to provide a surrogate place experience through technological means that performs the function of sense of place visualization in lieu of actual experience in the original location. Those with actual place location experience who visit the surrogate gallery place, gain an opportunity to reactivate their original memories and extend their sense of place impression of South Georgia.

This thesis also makes an original contribution by adapting existing qualitative phenomenological reduction methods (Moustakas, 1994) to a performative art practice as research application.

#### Introduction

#### .1 Context

This thesis—consisting of this exegetical document and the accompanying gallery exhibition—explores visualization of sense of place by focusing on the disused shore-based whaling station remains of South Georgia (SG) Island, especially those remains at Grytviken, SG. The whaling stations on South Georgia were in operation from 1904 to 1965 and at times these stations were the epicentre of commercial whaling in the sub-Antarctic and Antarctic.

The decaying remains of the stations have posed dilemmas for economic, historical, health and safety, and ecological reasons. Decisions about what to do with the station remains will affect this repository of industrial and cultural heritage—as well as the unique flora and fauna at South Georgia.

This research seeks to aid in decision making for the cultural heritage issues in South Georgia by providing attempts to create meaningful experiences for remote visitors and to increase understanding about both South Georgia's cultural heritage related to the whaling history, and for the experience of forming sense of place. This project focuses on the physical remains of the whaling stations of South Georgia over, for example, the flora or fauna. Relating to these built structures provide important lessons in sustainability and environmental symbiosis that are evident in the interpretation of remains of the stations. These ruins are important reminders of exploitation—a contrast with the current ethos of sustainably managing the island and its environment. Cultural heritage of the whalers who operated in South Georgia is also important and the industrial transformation of the more traditional notions of whale hunting that were native to the cultures associated during this time, is evident in the way the stations were laid out and operated. The SG stations were abandoned when whaling ceased as a widespread industrial activity. Ultimately the abandoned equipment and structures were ceded to the government from the companies that operated the leases on South Georgia.

#### .2 Research aim, question, and approach

The aim for this research project is to enable a wider public understanding of the historical context and cultural heritage of the whaling industry of South Georgia Island. In formulating the research questions, the importance of sense of place visualization was noted as a critical feature in the enablement of understanding of context and cultural heritage, and in the formation of representations. Sense of place for South Georgia was noted as an example of secondary place attachment, not primary—as in a location where a person is able to have been rooted in this place from birth and prior generations of family history.

Following these reflections, experience, and research—the primary research question was articulated as:

What would constitute an appropriate form of visualization practice for the artist-researcher as a newcomer to the South Georgia history, to enable a wider public understanding of the historical context and cultural heritage of the whaling industry of South Georgia Island?

The research question is open-ended, wide, and formulated with visualization practice in mind—to employ a reflexive approach in dealing with improvements to understanding. The approaches taken to explore visualization practice for South Georgia were primarily experiential and could be described as auto-ethnographic, with a three-month period of residence on the island, living among the remains of Grytviken and taking part in the cultural life of the island.

A secondary research question was formulated dealing with the practice of visualization approaches to the project:

What new practices of visualization emerge from the attempts to answer the principle research questions about visualising Sense of Place in South Georgia abandoned whaling stations?

This secondary question was formulated to communicate contributions to visualization practices in general as a result of investigation sense of place visualization in South Georgia.

Methodologically, this thesis identifies practice that rests on a performative notion that incorporates visualization of sense of place as an element in representation. Qualitative methods from phenomenology and hermeneutics are adapted into a performative methodology, by taking advantage of natural correspondences between them.

This thesis argues that as digital technologies of visualization are becoming increasingly prevalent in cultural heritage representation, it is necessary to reexamine how we understand, form, internally and externally visualize, as well as communicate sense of place, particularly concerning the whaling station remains of South Georgia Island—as they represent a remote, unique and vulnerable environment, and that the island lacks a permanent or indigenous population base. The island is continuously occupied but most of the small population are not permanently settled there, and none have permanent resident status or citizenship under the government. This turnover combined with the island's history and present use make it an ideal example to explore sense of place visualization, as without the mechanisms of sense of place visualization and transmission, medium and long-term goals cannot be enacted in place development. Sense of place is a key component of how we relate to the world and often an unquestioned assumption in our day to day existence, this thesis argues that deeper understanding of sense of place improves our ability to authentically better the world around us, through a dynamic and reflexive relationship with spirit of place, where place is constructed through awareness and intentionality as much as through the material sensory properties we encounter.

This thesis also advances the notion that metacognitive visualization—the idea that awareness in one's consciousness of sense of place visualization as a sensory and mental construct—plays an important role in actively constructing experience and place, and is important in both expressing and receiving communications about sense of place.

#### .3 Contributions to knowledge

Through making visualizations of the sense of place for South Georgia whaling station remains, this thesis reflects on the process of visualization, formation of sense of place connections, and exhibition to the public. Ultimately the various approaches align in a manner that creates a type of embodied surrogate place experience for South Georgia, utilising a gallery based installation and exhibition.

The primary contribution consists of three categories of statement regarding how the visualization practice that was explored in this thesis can promote understanding, by:

- 1. Delivering spatial and sensory information through visualizations that promote empiricist understandings of time, locational information, spatiality, and sensory derived material characteristics involved in place.
- 2. Delivering cognitive information through exhibits that function as narrative transmissions of cultural, constructivist connections, and cognitive related understandings of place.
- Promoting critical metacognitive understanding about individual sense
  of place formation and visualization through sensory linking and
  emphasis on embodiment, providing a space for reflexivity and
  reflection on binding moments of awareness.

These categories of approach mix within the exhibition to provide a surrogate place experience through technological means that performs the function of sense of place visualization.

An additional contribution is a methodological one, as this thesis provides an articulation of performative phenomenological reduction, accomplished through practice as detailed in Chapter 2.3 and implemented in Chapter 6.2. Although originally used in qualitative phenomenological study designs, the phenomenological reduction methods espoused by Moustakas (1994, p. 180–182) were adapted here to a performative, art practice as research study.

Chapter 7.3.2 Articulations of Visualization Practice outlines some of the visualization approaches used in this project that represent intriguing developments in the discipline, not necessarily new in and of themselves, they are articulated as a contribution in terms of their use in sense of place visualization. The rotational view or turntable view, as often seen in online retail websites, is useful in communicating visual and spatial properties to viewers for cultural heritage purposes. The approach of using multisensory presentation to allow for a deeper more embodied experience, promoting a fuller sense of place attachment. The actual use of embodiment itself in sense

of place visualization, whether virtual or actual, can create a surrogate place experience that usefully relates to the original place. And finally, incorporating a metacognitive aim and design to sense of place visualization allows for a greater level of understanding in sense of place formation for the individual. As this experience of forming attachment to place is personal and based on experience, it provides an avenue into understanding our embodiment in the world and relationships to both others and to physical locations that improves the quality of sense of place and therefore can positively impact the development of spirit of place.

#### .4 Thesis structure

As already stated, this exegesis combined with the exhibition of practical work, forms an equivalent to a written thesis. Although photographs from the exhibition of work from this research are included in this text, the opinion of the author is that the full sensory experience in the gallery exhibition of the installation and animated work is integral with the text in demonstration of the thesis.

This text is divided into three main parts; Part I Review, Part II Research, and Part III Results and Conclusion.

In Part I, Chapter 1.1 discusses the context of South Georgia Island with salient points of its history and current situation. In Chapter 1.2, the issues concerning sense of place visualization are discussed in terms of the literature around place as a concept. Chapter 1.3 concludes by summarising reviews of the representation of place and sense of place in various media, with a summary of media concerning South Georgia Island specifically.

In Part I, Chapter Two deals with methodological concerns, discussing approaches to the still controversial area of art practice as research in Chapter 2.2.1. Influences from phenomenology and hermeneutics are developed (Chapter 2.2.2) and contrasted with the idea of the performative in art (Chapter 2.2.3). The resulting correspondences are applied in an adaptation of qualitative methods toward a performative phenomenology that was employed in this research project, detailed in Chapter 2.3.

Part II consists of first-person accounts of the practical work made for this research project, the chapters have been divided in terms of the structural themes identified through the application of the performative phenomenological method that also serve to form the three main points of practice that serve as the contribution to knowledge of this thesis.

Part II, Chapter Three explains the practical work that consists of representations of walking and visualization.

Part II, Chapter Four describes the work dealing with material forms of narrative and memory.

Part II, Chapter Five introduces literature from meditation/mindfulness traditions that deal with first-person investigations into the nature of consciousness and then describes the remaining practical work of the exhibition that concerns embodied sensing and metacognitive visualization.

Part III consists of two chapters, Chapter Six Results which contains the summary of the performative phenomenological reduction, and then Chapter Seven: Conclusion which lists the contributions to knowledge of this thesis, explores limitations, and indicates future work.

#### Part I Review

Chapter One: Context of the research

#### 1.1 South Georgia Island

The Government of South Georgia and the South Sandwich Islands (GSGSSI) is a British overseas territory established in 1985, prior to this date the islands were politically a part of the Falkland Islands Dependencies. Captain James Cook was the first to circumnavigate South Georgia Island in 1775 and made the first landing—claiming it for the Kingdom of Britain and naming it the "Isle of Georgia" in honour of King George III (Headland, 1992, p. 23).

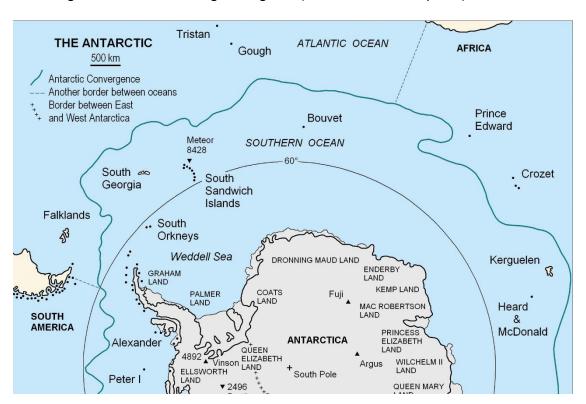


Illustration 1. Antarctic Convergence, L. Ivanov, CC BY-SA 3.0

Very quickly after Captain Cook's discovery of the Island, partly due to his published descriptions of the bountiful wildlife to be found at South Georgia, sealers began to operate in South Georgia, hunting the Antarctic fur seal for its pelt. Later the southern elephant seals were hunted for their blubber—which was cooked down to oil on site at "try works" on beaches in cauldrons called 'try pots'. The fur seal had become practically extinct by the 1900s and this brought about British legislation to protect South Georgia seal grounds, the later elephant seal hunting was more strictly controlled and is considered an example of a sustainably managed industry (or fishery). Both fur and elephant

seals have not been hunted in the region since the mid-1960s. Both species have made recoveries, especially that of the fur seals being a remarkable repopulation—considering they were only a very few left at the Bird Island colony at SG by the end of the 19<sup>th</sup> Century.



Illustration 2. A rare white fur seal in front of the remains of Grytviken

Sealers continued to operate in South Georgia through the 19<sup>th</sup> Century and whaling became an important industry due to the scarcity of whales in waters further north during the 20<sup>th</sup> Century. Grytviken was the first established South Georgia whaling shore station in 1904, spearheaded by Norwegian Carl Anton Larsen—who had experience of whaling in Arctic waters. His company was established in cooperation with three Buenos Aires residents: the Norwegian P. Christophersen, the USA national H.H. Schleiper and the Swede E. Tornquist. The English name of the company was the Argentine Fishing Company or in Spanish, the Compañía Argentina de Pesca, with the company commonly called 'Pesca'. Pesca was followed by the establishment of six more whaling stations on the island; all seven were established under British leases issued from the Governor of the Falkland Islands (Basberg, 2004).

In the 1920s shore based whaling industry entered a decline as whales become rare in waters surrounding the island through overhunting. Pelagic, or

ship-based whaling (where the whale carcass was processed at sea rather than on shore) became more popular and many SG stations adapted as bases for the pelagic fleets. Grytviken carried on as a shore based station and did not close until 1965, being the longest station in operation on South Georgia. By the close of whaling in the region, British legislation required the whaling stations to process as much of the carcass as possible for oil and other products—to avoid the waste that the earlier blubber-only processing had caused. The former practice of only harvesting the oil-rich and easy to extract blubber caused the beaches to be littered with accumulated whale skeletons. The whale oil extraction processes—ultimately from blubber, meat, and bones —all required different methods of cooking and extraction. These various techniques and sources resulted in different qualities of whale oil that were used in a range of application from foodstuffs, pharmaceuticals, cosmetics, industrial lubricant, chemical products and the production of nitroglycerine. The meat residue was then further refined into an additive for stock food, and bones were ground for fertilizer, called "guano" in imitation of the fertilizer derived from bird guano. There were later efforts to freeze fresh whale meat for human consumption and for liquid purification of meat extract, for use in soup making (Basberg, 2004).

The range of production at the stations made for a fascinating industrial process. However, acknowledgement must be made as to the contemporary unpopularity of whale hunting—especially as it occurred in its modern industrial application in South Georgia. In contrast, some cultural attitudes to traditional whaling regard the activity as a historic and brave sport or profession, which built national prosperity and may have been a long cultural tradition in a region.

Whaling is thankfully prohibited now in the waters surrounding South Georgia Island; some 175,250 whales were processed at South Georgia's shore stations in the years of 1904–1965. Far more whales were killed in the Antarctic region as a whole and pelagic whaling accounted for an estimate of 1,432,862 animals between the years of 1904–1978, when hunting of the larger species ended (Hart, 2001).

A variety of nations engaged in modern industrial whaling in the sub-Antarctic waters near South Georgia in the first half of the 20th century. Shore based processing stations operated under lease from the British government in competition with—or sometimes as bases for—the pelagic floating factory ships which processed whale carcasses on the open sea. Many species of whales were hunted to near extinction, and some stocks have not recovered in the region despite fifty years of international cooperation and the international moratorium on commercial whaling in place since 1982 (Hofman, 2017).

The whaling industry of the past is generally held in an extremely negative regard—for the unsustainable industrial hunting of many species of whales. However, this activity should be seen in the context of the time, with products deemed necessary for the industrial age, it had an impact in many areas; such as pharmaceuticals, lighting, food products and industrial processing agents that provide a legacy today.

The defunct, abandoned, and geographically remote whaling stations of South Georgia Island in the Antarctic Convergence represent a unique repository of cultural heritage artefacts and sites that are largely unprotected and exposed to the elements. The most accessible whaling station site on South Georgia Island is Grytviken. The greater accessibility at Grytviken is due to its location near King Edward Point and from the undertaking of asbestos removal and environmental cleanup at the site. This resulted in the removal of many structures at the site leaving machinery exposed to the elements. The policy of allowing sites of cultural heritage to naturally deteriorate is an established one, but the conditions at Grytviken because of the asbestos removal, mean that formerly housed elements may degrade more quickly than similar ones at the other whaling station sites. A record of the ongoing change is important to document at stages in its decline—as this data has value and potential to inform policy in site management. Asbestos remains an issue at the other station sites, limiting any access except by special permission from the GSGSSI.

The other whaling stations are listed as prohibited areas with the GSGSSI due to health and safety concerns regarding asbestos contamination and the general derelict state of the remains which pose danger in the possibility of

falling debris and unsafe structures. Nevertheless, these other stations remain an important comparison to Grytviken due to their intact nature and permission was therefore obtained to access both Leith and Husvik stations for comparison with Grytviken—this experience is recounted in Chapter Four: Material forms of narrative and memory.

Grytviken has numerous examples of structures that have been repurposed, and hence maintained for modern non-whaling purposes. The Manager's Villa currently houses the Museum, the Drukken Villa currently provides accommodation for museum staff, and the Nybrakke (New Barracks) building was (in the timeframe of the course of this project) converted to provide for emergency accommodation of cruise ship visitors who could possibly be stranded ashore for a time by deterioration of weather conditions or another event. The Grytviken Church was renovated and is maintained by SGHT as a church, the Coffee Roasting House is maintained as a recycling storage area, and various store buildings are maintained as repositories of equipment for the museum and residents and as workshops.

To explore the South Georgia Whaling stations remains, a period of residence on the island was organized for Austral summer 2013–14. During this time, I lived at the station under the communal rules operating for the British Antarctic Survey (BAS) base located at King Edward Point (KEP) and around the cove at the South Georgia Heritage Trust (SGHT) run museum at Grytviken. During this time, I explored and photographed the extensive remains at Grytviken, I also was participant in the culture of the island as a resident, living with museum staff and interacting with the public—visitors to the museum and island from cruise ships, private yachts, military ships, and research vessels. This islander experience was instrumental in framing the approach I would take to representing sense of place for the station—as sense of place is formed individually, primarily through experience.

Being resident at Grytviken has allowed me to engage directly with stakeholders in the South Georgia environment. One very positive interaction has been with cruise ship passengers that alight in the area, are toured through the whaling site and then visit the museum and gift shop. As residents of Grytviken, museum staff were often invited aboard the anchored cruise

ships for dinner and social interaction aboard ship with the passengers and crew.

It was interesting to note that most visitors engaged in conversation reported their visit to the museum and the whaling station tour to be more interesting than they expected it would be. Most visitors appeared to have been motivated by nature and wildlife in travelling to South Georgia, but the buildings at Grytviken and the Museum allowed a greater appreciation of the context of the site than they anticipated. Many visitors expressed abhorrence for the whaling history, some quite strongly.

While on location in South Georgia for this research project, over eight thousand high resolution, raw format digital photographs were taken of buildings and sites in Grytviken. These serve as a documented record of the state of remains during my visit but also as primary reference material to craft the visualizations or representations that constitute the practice based approach of this project. A selection of some of the views taken in the photography are enclosed in the Plates section of this document; however, the true value of this photographic documentation is the ability to see in the round through the multiple views of the photography based visualization work—best surveyed as part of the gallery exhibition.

In South Georgia the whaling activity was an international venture, at various times different national cultures dominated the activities in characteristic ways. The British licensed different companies, some based out of Argentina but often led by Norwegian nationals. Crews on ships and at stations consisted of different blends of nationalities and participated together in interactions related to residence at the island and its waters. The stations' personnel typically came from nations with a related tradition of historical whaling, but South Georgia has no indigenous population—indeed no permanent human habitation—although currently it is continuously habituated by rotating BAS staff.

The typical historical inhabitant of South Georgia would have lived on the island during the summer whaling season and perhaps returned a few times over the years for different seasons of work. There were some who worked many seasons on South Georgia, returning repeatedly but also those who

worked only a single season. Some men were hired to live as part of an overwintering maintenance skeleton crew during the long Antarctic winter. Those who returned to South Georgia seasonal work numerous times, formed more of a long-term rather than transitory relationship with the island. In contemporary times the typical visitor to South Georgia is on a tourist ship and alights for excursion tours at the various landings of South Georgia, before sailing onto Antarctic portions of the tour. There are inhabitants on South Georgia—these being the personnel of the BAS station at KEP, and the seasonal museum staff at Grytviken, as well as seasonal 'yachties' who may anchor around the island at various sites and come ashore for excursions. Typical methods of research for exploring cultural heritage in relation to an activity such as whaling, would prioritise the population of a place and a population's descendants. In South Georgia there is not a population in the sense of a people from a place—yet there is a remarkable impact of the place on a given visitor, tourist or worker. The legacy of industrial whaling at South Georgia also affects the personal families of those involved in the island's history, as well as those unrelated by blood but who have found a place however temporary or long term—on the island.

#### 1.2 Visualizing sense of place

#### 1.2.1 Place itself

Place itself is a common everyday understanding and aspect of our being that it is easy to take for granted. It is fundamental to our experience in the world and our own minds. Digging deeper into the concept of place rewards us with insight and understanding not only of a given location, but of our selves. Trigg (2012, p. 3) observes that philosophical thinking on place tends to take one of two perspectives, 'First, place is thought of as an empirical idea which has a reality independent of human life. Second, place thought of as a constructive product of human experience, such that without human involvement, place would lose definition.' Although it is helpful to consider different aspects to the meaning of place, it is important to consider that both perspectives of place are unified in the reality of place, there is no opposition in holding both points of view simultaneously. Tuan (1977, p. 161) expresses this by first pointing out that there are a number of ways to define place but chooses 'place is whatever stable object catches our attention'. This may seem a simple observation, but it captures both the reality of the independence of objects in their materiality outside of our attention, and the unfolding of place as our minds attend. For Tuan (1977, p. 161) this process takes place at different levels, he explains:

As we look at a panoramic scene our eyes pause at points of interest. Each pause is time enough to create an image of place that looms large momentarily in our view. The pause may be of such short duration and the interest so fleeting that we may not be fully aware of having focused on any particular object; we believe we have simply been looking at the general scene.

This position entails an ability to distinguish place at levels of interest or involvement, time, and focus or attention. Consider the example of a place you know well, your home. Within the home place are a myriad of objects, some that you spend more time with than others, some you have had longer than others, and some that compose areas that may be relatively more important to you...for example if you are a gourmet chef—the kitchen and its constituent places may be an area you are aware that you consider frequently. This connection between place and individual attention is a factor in Casey's claim

(1996, p. 46) that '... as places gather bodies in their midst in deeply enculturated ways, so cultures conjoin bodies in concrete circumstances of emplacement.' What after all would a kitchen be without a cook? The kitchen brings the cook, and this is their place together, the place and the person. Looking at a connection other than in our habitual emplacements, Tuan's earlier definition incorporates not only the familiar place but any place that captures attention, even fleeting. He posits that 'Place is a pause in movement. Animals, including human beings, pause at a locality because it satisfies certain biological needs. The pause makes it possible for a locality to become a center of felt value' (Tuan, 1977, p. 138). This pause is indeterminate in time, it could be a short time or a lengthy stay. Although one could consider that longer pauses would correlate with higher interest or importance, this need not be the case. We may have fleeting encounters with significant places in our lives, due to the constraints of time's commitments. Casey (1996, p. 36) reveals that '...the phenomenological fact of the matter is that space and time come together in place. Indeed, they arise from the experience of place itself.' On first consideration this may seem backwards, experiencing place gives rise to space and time as we move and pause. It is a fundamental circularity between the concepts and our experience of them, place cannot exist without space and time, but the equation works in the reverse as well. Along with space and time, our involvement in the creation of place prompts Casey (1996, p. 33) to order that 'Now we must, finally, put culture back in place.' He maintains that 'This is not, our course, to locate it anywhere other than where it already is' (Casey, 1996, p. 33). We know this, it is evident—but keeping in mind the ramifications that place is culturally cocreated and maintained and that a being's existence is emplaced leads us to better understanding. Casey (1996, p. 33) identifies a problem where thinking around culture (in what he terms the late modern Eurocentric view) primarily locates culture:

...either in overt behavioural patterns...or in symbol systems (e. g. in structuralist accounts of verbal language and transverbal symbols). Culture is situated either in something strictly observable or in something sheerly diaphanous: the perceived and recorded action or the evanescing sign.

Casey (1996, p. 33) acknowledges that the field of cognitive psychology has relatively recently encouraged a more subtle look at mind and that hermeneutical theories of meaning have contributed a richer meaning of language and sign systems, but he identifies the missing element of cultural research to be culture's inherent emplacement. Once agreed that place is deserving of study, not because it is unknown—but due to its very pervasiveness in our lives—we can consider approaches to examination of place and ways to enhance understanding around the concept. In considering ourselves deeply bound to place and recognizing it as part of our cultural construction, approaches to the study of place can consider ways to deepen understanding of our experiences.

## 1.2.2 Phenomenological place

A detailed approach taken with respect to this research project is taken up in Chapter Two: Methodological Approach, however, it is appropriate here to touch on the relationship between phenomenology and place. This allows the contextualisation of the approach within the section on place in broad terms, so that some of the basic affinities can be seen and then built on later. Broadly speaking, phenomenology is not opposed to the scientific method, but considers that many of the very benefits that the scientific method has provided us as a species, causes a kind of blind spot. Certain kinds of questions are more likely to be asked regarding the answers that scientific methods can provide. Tuan (1977, p. xvii) points out that 'A large body of experiential data is consigned to oblivion because we cannot fit the data to concepts that are taken over uncritically from the physical sciences.' Tuan continues (1977, p. xvii) that in ignoring these experiential aspects:

Our understanding of human reality suffers as a result. Interestingly, this blindness to the depth of experience is in fact a human condition. We rarely attend to what we know. We attend to what we know about; we are aware of a certain kind of reality because it is the kind we can easily show and tell.

This demonstrativeness of quantitatively based evidence can be informative, and certainly to give a latitude and a longitude (for example) is part of the way we can define place, however consider the experiential meanings of any place connected with a set of coordinates, be it an orphanage, a hospital, or a

fairground. Well-designed quantitative methods can of course reveal more about these locations than just physical coordinates, but the individual experiences and meanings of the emplaced here can offer much to increase our understanding of these places. Trigg (2012, p. xvii) feels:

...the study of memory and place profits from a broadly phenomenological direction...the relation between embodiment, place, and phenomenology is both privileged and fluid, developing the means by which spatiality becomes both existentially and affectively meaningful.

Trigg continues to describe a mediation occurring in phenomenology between 'place as an objective reality, presented in Kant as a transcendental form of experience, and place as a socially constructed realm of materiality and intersubjectivity' (Trigg, 2012, p. xvii). This duality of objective reality and social construction of place becomes revealing as we puzzle the ways that we interface in the circular relationship we share with the world. Casey (1996, p. 13) instructs that 'Phenomenology began as a critique of what Husserl called the "natural attitude," that is, what is taken for granted in a culture that has been influenced predominantly by modern science—or more precisely, by scientism and its many offshoots in materialism, naturalism, psychologism, and so forth.' By calling attention to the influence of scientism (used here to mean the belief that all valuable answers and knowledge are scientifically orientated) Casey traces phenomenology's beginnings as being opposed to the assumptions of scientism, partly formed—no doubt—from science's remarkable achievements during this period. However, as Tuan (1977, p. 9) notes, 'To experience is to learn; it means acting on the given. The given cannot be known in itself. What can be known, is a reality that is a construct of experience, a creation of feeling and thought.' This primacy of experience as a knowable, understandable reality prompted Merleau-Ponty, as Trigg (2012, p. 9) reports, to place 'the body not only at the center of all things, but also at the origin of things, thus elevating the bodily self prior to cognition.' Trigg points out that this view dissents from Husserl's idea of the transcendental ego as being the primary experience. This primacy of the body in place, or embodiment is examined in more detail within Chapter Two of this document, but brings us here to Casey's (1996, p. 24) explanation that 'Just as staying in place corresponds to position and moving the whole body within one locus

answers to place proper, so moving between places corresponds to an entire region, that is, an area concatenated by peregrinations between the places it connects.' As we move outward from the body's former position, places evolve and flex, linking and separating—to fluidly accommodate our notions of region and difference. As we move from taking place for granted and instead bring place into our awareness as a subject—investigating the phenomena of place through our existence, the body becomes a connection through which we can better understand issues of place and how to relate to them.

#### 1.2.3 Embodiment in place

Considering how we relate to place leads us to investigate our embodied sense of place. This sense of place is specific to unique places, but the term can also can be used generally, in describing the quality of relating to many places. As we move into a new place and form a sense of place for that location, we relate one place to another place. Conceptualizing a place as connected and similar or different and opposed, in various characteristics. Casey (1996, p. 45) describes our condition as:

Standing in this place, thanks to the absolute here of my body, I understand what is true of other places over there precisely because of what I comprehend to be the case for this place under and around me. This does not mean that I understand what is true of all places but by grasp of one place does allow me to grasp what holds, for the most part, in other places of the same region.

This relation to 'truth' of a place speaks to a profound understanding formed in place that is relatable to other places and demonstrates the benefits of exploring our connection to place, as it leads to a more conscious (or metacognitive) sense of place that allows us to understand other places and their issues more deeply. Hay (1998, p. 5) claims that 'The development of a sense of place is particularly influenced by residential status. Those with more superficial connections to place, such as transients or tourists, do not develop the strong attachment that is often found among insiders raised in the place who then remain there for most of their lifetimes.' Sense of place is not a tightly defined term, and to say that someone's connection to place is 'more superficial' is not to say that it is intrinsically superficial, but only in comparison to a more deeply held connection. Tuan (1977, p. 194) describes an aspect of

'rootedness' as one that 'means that a people have come to identify themselves with a particular locality, to feel that it is their home and the home of their ancestors'. Rootedness or even 'attachment to place' is more specific in describing deeply held connections to a place. For example, someone with a high degree of rootedness to a particular place may or may not have a conscious awareness of that connection, although it exists nevertheless.

Casey (1996, p. 39) explores the term 'dwelling' to describe a connection to place—different than rootedness which seems more related to time, dwelling speaks to an awareness. He observes that '...it is in dwelling that we are most acutely sensitive to the effects of places upon our lives.' This sensitivity in dwelling allows Casey (1996, p. 39) to connect dwelling and travel:

Equally eventful, however are the journeys we take between the dwelling in which we reside, for we also dwell in the intermediate places, the interplaces of travel—places which, even when briefly visited or merely traversed, are never uneventful, never not full of spatiotemporal specificities that reflect particular modes and moods of emplacement. Even on the hoof, we remain in place. We are never anywhere, anywhen, but in place.

In taking place with us as we go, our refinement of our sense of place can be problematic. As Trigg (2012, p. 2) points out upon returning to a place after an extended absence, 'we are often shocked by both the small and the vast changes, effectively alerting us to the radical indifference places have to the sentiment we apply to them'. This affront that a place would have the temerity to develop and change without us, is an indication of how deeply we entangle external reality with our constructed conceptions of place, and the importance we attach to our environment. We also react with an emotional response to the alteration of places we dwell in, whether we see it occurring slowly in our midst by paying close attention or if it occurs at a rapid rate of change, as in a disaster. Even though all places change, many elements of places persist due to their circumstances or even in changing, possess a continuity in change. This distinctiveness can be termed 'spirit of place'. A translation from the Latin 'genius loci', Relph (2007, p. 19) explains that for the Romans 'the world was a sacred space occupied by a pantheon of gods and spirits. Every forest grove, mountain, river, village and town was the home of its own spirit that gave identity to that place by its presence and its actions...the expression 'spirit of

place' now has a mostly secular meaning that refers to the distinctive identity of somewhere.' In distinguishing spirit of place Relph (2007, p. 19) continues to clarify that 'sense of place' is 'better reserved to refer to the ability to grasp and appreciate the distinctive qualities of places.' He describes a circular connection between spirit of place and sense of place, observing that a 'powerful' spirit of place will help lead to a stronger sense of place among its community and that where there is a 'strong' sense of place a community is motivated to create change that can lead to 'a remarkable spirit of place.' 'Finding the Spirit of Place' was the theme of the 2008 General Assembly in Quebec of the International Council on Monuments and Sites (ICOMOS), this led to the ICOMOS UK Cultural Tourism committee draft of the Norwich Accord (ICOMOS Norwich Accord, 2009) which found:

[Significance or Spirit of Place is] not an objective quality, or one accepted primarily as being inherent in a place, but reflects fundamental relationships between people and places. The Spirit of Place is the outcome of human inspiration, creativity, endeavour, and validates on-going interventions to preserve specific architecture, archaeology, cultural landscapes and historic urban environments with their associated memories, stories and traditions.

Sense of place is often used in a more individual way than spirit of place—which can be taken to describe a more collective aspect of the meaning of place. This is not to say that the individual is not connected to the collective, quite the opposite in that spirit of place is perceived and made meaningful through the faculty of the sense of place. Although there is a circularity between the two as noted earlier, sense of place seems to be there before spirit of place by beginning in the body. 'Sense of place' as a term can describe an awareness of how we relate to a place—a metacognitive use. This embodied sensing relies on the operation of our physical senses as well as the activity of our mind to come together in sense of place.

#### 1.2.4 Sense of place

In looking at and considering how we form the sense of place, a deeper understanding of our connection to a place and history can emerge, but we can also improve our faculty for sense of place. Sense of place itself is a type of experience that we have, Tuan (1977, p. 8) defines experience as 'a coverall term for the various modes through which a person knows and

constructs a reality. These modes range from the more direct and passive senses of smell, taste, and touch, to active visual perception and the indirect mode of symbolization'. Casey (1996, p. 17) drawing from Merleau-Ponty maintains that:

...there must be, as an ingredient in perception from the start, a conveyance of what being in places is all about. Merleau-Ponty considers this conveyance to be depth—a "primordial depth" that far from being imputed to sensations...already situates them in a scene of which we ourselves form part.

This primordial depth of embodiment in place is pre-conscious, pre-reflective. Our minds operate automatically to make sense of the world at levels that we are not normally conscious of, the levels include cognitive operations of course—our memory, emotions, and thoughts all affect perceptions and interpretations. We can become more conscious, more reflective, but Casey and Merleau-Ponty are referring to a level of awareness in perception that remains beyond reach at the 'primordial depth'. This facility exists for good reason, we would not be very efficient creatures if at every step we stopped to process the pressure resulting from placing our foot on the ground, the direction and force of the breeze on our forward momentum, or deciding to have a heart beat or draw a breath. However, we do also have the facility to deepen our awareness and become more conscious in our actions and perceptions, for example a runner can avoid injury by having the right footwear for running surface conditions, we can be aware of our resting heartbeat and exercising heartbeat thus leading to the taking of steps to improve general physical fitness. Likewise, being aware of breathing patterns can allow a measure of control over mood. The advantages in attending to what can otherwise be left as automatic is clear; in similar ways we can strengthen and improve our sense of place through observing in the moment and reflection at higher levels of cognition on the many taken-for-granted levels of the operation of sense of place. Much of our experience of place occurs in relation to our memories, either of places we do not currently occupy or indeed in the memories associated with where we currently find ourselves. Trigg (2012, p. 9) conceptualizes this attachment to a place through memory as one where memories are held by a place, he states that '...being held by a place means being able to return to that place through its role as a reserve of

memories...those same places crystallize the experiences that occurred there.' This crystallization of experience allows for another means of experiencing place—which is through the relation of place from one individual to another. Perhaps in prehistory this occurred in stories told around the bonfire from returning explorers or wandering adventurers. It is an easy enough scenario to imagine, a community gathers to hear accounts of places beyond their ken. Fantastical beasts described by an eyewitness to those who have had no experience of them, different types of food or poisonous plants, accounts of foreign people with strange ways and gods and descriptions of how they live in their villages, towns, or cities. Later textual accounts of place were written down, maps and drawings continued to evolve, place was represented in visual art and a more developed theatre, knowledge was accumulated, organized, and shared more widely. This communication of place, and the symbolizations involved, allows us to take different perspectives on our own experiences with lived place and to make decisions that can involve a wider experience than just our own actual encounters with place.

## 1.2.5 Sense of place visualization

Representation of place allows us to consider not only the material features of a place but by incorporating the concept of sense of place, we can also at a different scale incorporate the visualization of sense of place—either in terms of a specific place or the concept generally. There is overlap between the terms visualization and of representation, symbolization plays a role as well. From how the terms have been used here so far, we can contrast the representation of the spirit of a place with the visualization of the sense of a place without being drawn into controversy. Visualization and representation as words often are used interchangeably, typically the term visualization might be used more in scientific work than representation is—as in the example of data visualization. Art related work seems to tend to use the word representation more. The Concise Oxford Dictionary (Pearsall, 2002) entry for the verb 'visualize' are: '1. Form a mental image of; imagine. 2. Make visible to the eye.' If we consult the same publication for a definition of the verb 'represent' we obtain: '1. Be entitled or appointed to act or speak (for someone)... 2. Constitute; amount to. 3. Depict in a work of art. 4. State or point out clearly.' The meanings for 'visualize' are particularly apt in that the

formation of a mental 'image' is an acceptable way to think of the sense of place, if we can stretch the definition of a mental image or the imagination to include not just a visual impression, but multisensory inputs as well as cognitive involvement—all blended with the visual. It would be cumbersome for example to consider the 'olfactorization' of an aroma imagined mentally and break the various senses down each into their own terminology. There is also the consideration of how the senses and cognition come together into 'sense of place' intermingled and prompting links between the imagined senses in memory. For example, to have the mental image of a lemon, and to try to make this imagined lemon very vivid, can provoke other associated sensory recall in one's imagination. This image we have formed in our mind cannot be 'seen' by anyone and can include memories of taste, aroma, and tactile qualities, it is not there in our heads as though we have display screens implanted. However, we tend to interpret this imaginative sense primarily in terms of our vision. The other denotation of visualization speaks of making the invisible or difficult to see—visible. This is acceptable as well in that although the physical characteristics of place are visible, sense of place is not. It can only be communicated by interpretation, symbolic means, or through experience itself. Tuan (1977, p. 10) observes that:

Seeing...is not the simple recording of light stimuli; it is a selective and creative process in which environmental stimuli are organized into flowing structures that provide signs meaningful to the purposive organism.

It can be argued that it is just as clear to use 'representation' for these reasons, especially as a representation is not necessarily linked to the single sense of sight as much as visualization is in its etymology; however, the significant aspects here are that the sense of place is not a visible subject itself, therefore 'requiring visualization' and that there are claims made in the practical exhibited work of this thesis that viewers must in some ways—that correspond to metacognition—use a critical element of mental imagination to appreciate the sense of place exhibition, therefore 'requiring visualization'. However, the point is accepted that representation and its various meanings could likely be made to work as well to explain the concepts communicated here.

For example, in her work Marshall (Marshall and Rowley, 2010, p. 3245) uses the term representation and interpretation in regard to sense of place, all three terms are relatively interchangeable:

Artists, through their creative outputs, offer us interpretations of human life which are far more than simple reproductions of reality. The desire for artists to represent some insight they have felt, some connection with place, or an expression of the engagement they have experienced with the cultural, historical or physical world they exist in, has resulted in the production of artworks. When we interpret artworks as forms of social and personal communication, when we analyse them cognitively as well as aesthetically, it is possible to use them in a variety of means which may assist in cross-disciplinary research.

Visualization, as it has been discussed, can be seen as an element of representation, in the sense of creating a mental image in a step prior to the creation of communicating in representation and through practice and making—prototyping that imagery. Just as in perception and cognition, prereflective though they may be, memories thoughts and emotions affect perception and perception in turn affects cognitive processes. Likewise, in visualization, (an interior mental imagination) can result in prototype imagery (a visualization), as the artist makes work there is a feedback into the interior visualization in the making process that circles and results in representation.

## 1.2.6 Authentic place

The improvement of the faculty of our sense of place enhances the ability to operate relatively in an increasingly globalised world. Experiences from places can demonstrate lessons and examples for how we incorporate regional categories and differences, affecting the development of spirit of place across a larger and more efficient world—not necessarily in a project of homogenization and industrial efficiency—but in connecting with and encouraging the inherent potentials of places to be better. This outlook is tied to the concept of 'authenticity' when discussing place. Huyssen (2010, p. 18) cautions us by tracing the evolution of the term from eighteenth-century ideas in literature and art where 'notions of authorship, genius, originality, selfhood, uniqueness, and subjectivity...became more desirable and intense the more it was threatened by alienation, inauthenticity, and reproducibility in the course of modernization.' He claims that these desires in the modern world has led to

'retro authenticity, authentic remakes, and authenticity consulting, all phenomena which implicitly though unknowingly deny what they claim to be' (Huyssen, 2010, p. 18). With a tight literal definition, sense of place visualization cannot be authentic of the location it relates to, as it is not the thing visualized or represented itself in a quantitative or scientific sense. Casey (1996, p. 28) informs us that 'Stripping away cultural or linguistic accretions, we shall never find a pure place lying underneath—and still less an even purer Space or Time. What we will find are continuous and changing qualifications of particular places: places qualified by their own contents, and qualified as well by the various ways these contents are articulated (denoted, described, discussed, narrated, and so forth) in a given culture.' It is here within the complexity of place that we can find ways to consider authenticity as it relates to sense of place. In the Nara Document on Authenticity an approach to authenticity—in terms of approaches to reconstruction, preservation, and heritage—was formed in consultation with ICOMOS, the International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM), and the World Heritage Centre. The document (Larsen, 1994) states that:

It is thus not possible to base judgments of values and authenticity within fixed criteria. On the contrary, the respect due to all cultures requires that heritage properties must be considered and judged within the cultural contexts to which they belong...authenticity judgments may be linked to the worth of a great variety of sources of information.

Aspects...may include form and design, materials and substance, use and function, traditions and techniques, location and setting, and spirit and feeling, and other internal and external factors. The use of these sources permits elaboration of the specific artistic, historic, social, and scientific dimensions of the cultural heritage being examined.

The United Nations Educational, Scientific, and Cultural Organisation (UNESCO) has expressed similar judgement in relation to authenticity, Paragraph 24 (b) (i) of the operational guidelines refers to the test of authenticity for reconstruction 'in design, material, workmanship, or setting and in the case of cultural landscapes their distinctive character or components' (UNESCO, 1997 p. 17). Although sense of place visualization is not necessarily concerned with a literal authentic reproduction of artefacts, it can

play a role in determining issues of authenticity for these types of projects as it plays a role in the 'spirit and feeling', 'cultural contexts', 'internal factors', and 'distinctiveness' so important to judging authenticity for cultural heritage projects. Another dimension in authenticity is pointed out by Relph (2007, p. 22) who claims that 'Authentic places are those that simultaneously reveal and respond to the qualities of spirit of place and reflect the existential realities of being'. In order to see the circular impact of sense of place visualization and spirit of place, it helps to connect this statement of Relph's with Tuan's observation that 'If a piece of sculpture is an image of feeling, then a successful building is an entire functional realm made visible and tangible' (Tuan, 1977, p. 164). These observations can lead to a way of thinking that rather than sense of place visualization being judged as authentic or not, the place itself—a product of sense of place visualization regarding its built and cultivated environment—can be authentic or not as a product of culture. As Tuan (1977, p. 164) later reflects 'The patterns are the movements of personal and social life. They are fluid and enormously complex.'

If we consider Tuan's (1977, p. 164) example of the place Stonehenge, he asks the question:

How is it possible for a monument to transcend the values of a particular culture? [A monument like Stonehenge] carries both general and specific import. The specific import changes in time whereas the general one remains...most monuments cannot survive the decay of their cultural matrix.

This point that Stonehenge remains meaningful in a general and monumental way to our present cultures demonstrates the significance (or spirit of place) that the site has taken on, while many of the facts of its construction and knowledge of the way the site was used by the culture that constructed it have faded away. But there is an argument that the site is an active place in other ways than just as an archaeological relic. There would be local people who live and work near the site, dwelling there. They might perhaps actually work in its gift shop or other facilities, those who do research on the remains, and so on. A community that would likely have a very different sense of place of Stonehenge than either someone who had not visited the place at all or as a casual visitor. Similarly, a visitor might have a religious or spiritual inclination and regard Stonehenge as related to the tradition of their faith. Gathering

there at times of the year with others sharing this interpretation. These sense of place related cultural aspects interweaving with the contemporary place of Stonehenge however, are not of its original 'cultural matrix'. This example of the complexity of a place and its cultural matrix leads to consideration of different visualization strategies employed by practitioners of place representation.

## 1.3 Contextual review for place representation

In looking at examples of the representation of place in different media types, variety was prioritized as the goal of a review. Some of these examples stem from traditional portrayals of place as setting within animated narrative work—either used as a meaningful environment for the character in a scene or as a positioning spectacle—some as place documentation, a game environment in an interactive video game world fictionalised from parts of whaling history, an interactive environment of recreated historical spaces that contain fictional stories, a visualization of industrial heritage, and an autobiographical multimedia work using poetic place imagery in a personal story.

### 1.3.1. The West of Scotland

The animated film *The Illusionist* (Chomet, 2010) depicts authentic locations in Scotland circa 1959...notable for its primary setting in Edinburgh, the main character also travels from the Glasgow train station at Kings Cross to a remote Scottish western isle. This journey is poetically depicted across its different modes of transport: of train, ferry over the Loch Fyne, automobile, and small personal boat on the Atlantic to finally reach the public house that the visiting illusionist will stay at, the entry to which is only a few steps from the moored boat. The illusionist has journeyed to the village to perform at a small celebration in the pub, which marks the installation of electricity for the island dwellers. This journey to a remote island, whose way of life will change radically with the introduction of electricity, is reinforced in the wider reading of the film's treatment of progress and changing times. The popularity of dance hall stage performances has faded, and the illusionist must take less prestigious entertainment venues—such as this engagement—to survive.

A sense of place is conveyed, linking the changing village life to the dying away of earlier forms of entertainment. In the film the illusionist's performances are contrasted with the desire of the public for change, exemplified by the advent of rock and roll music, and the fading away of earlier styles of living.

At the celebration in the pub, the villagers hold a traditional Scottish ceilidh, group dancing with bagpipe and fiddle music. The oil lamps are extinguished and then the electric light is switched on, a harsh and cold blue light has

replaced the warmer yellow hue, the illusionist then performs his magic act to applause. Upon leaving the room he stops in the doorway and seems taken aback before continuing through, directly after his exit, a jukebox is brought into the pub and the villagers celebrate to its technological spectacle as rock and roll music plays. The energy of the environment—that is the space made up of lighting, audio, and the physical movements of the participants—has changed radically at the flick of the electric switch. The spatialisation has changed as well with a pre-electric, traditional culture partaking of remoteness giving way to a more globalised, homogeneous, and modern model.

The spatial immersion of the journey to the remote island and methods used in its depiction is a critical factor leading up to these narrative formations. It sets the stage by the logistical difficulties advancing into the region, and evokes the nostalgia of earlier times and technologies, to ultimately show that even these quaint steam engines and carriages that allowed smoking of tobacco, were at the time displacing earlier technologies and ways of life.

## 1.3.2. Aerial Brighton

In the animated winter classic *The Snowman* (Jackson and Murakami, 1982), a young boy's snowman has come to life. Toward the end of the middle third of the twenty-five-minute animation, the snowman takes flight with the boy and they circle over his neighbourhood, before flying over Brighton. The animation was originally created in 1982 for television from a children's picture book (Briggs, 1978). The animation possesses no dialogue, similarly the book has no words. However there are lyrics to one song in the animation (Walking in the air, 1982). This song begins as the snowman and the boy begin flying after an instrumental fanfare. They are joined by some other flying snow people, before flying together over the landmark of the Brighton Pavilion and from there over streets to the Brighton Marine Palace and Pier (generally known as the Palace Pier). Just after the snow people join, our view becomes a firstperson one, as though we ourselves were in flight. The abstracted scenery of Brighton is presented as a continuous shot without cuts from this point. We fly above the setting, with the view rotating and curving. As we circle the landmark of the Palace Pier the camera reveals itself to be ahead of the group of snow people and in curving back allows them to enter the frame seamlessly above

the pier at which point the group flies on over the ocean while the snowman and boy circle close in to the building, before heading out to sea on their own.

This view of a popular area of Brighton (one the boy in the film lived outside of and feasibly journeyed into for family outings) is presented as a sense of place visualization, primarily of the awe and wonder of flight and aerial viewpoint as well as touching on the nostalgia of a special public space. A theme of this animation that develops is the question as to whether this was a dream or imagined journey with the snowman, and the details of the pavilion and pier do not provide the answer, as we could expect that the child attended performances, went on outings and then has perhaps recreated these in his dream albeit from a new perspective. In the book, the snowman and boy land at the pier and await the sunrise before returning to his home, whereas in the animation they continue to a fantastical polar setting to meet Father Christmas and enjoy the company of other snow people at a party under the aurora borealis. In the animation this scene ultimately resolves the question of reality from the boy's viewpoint, as it is here that Father Christmas gives the boy a scarf, which at the end of the film, he retrieves from his dressing gown pocket upon discovering the melted snowman in the morning.

People with similar familiarity and attachment to these specific locations from their past, will subjectively relate to the film in different ways than others without actual exposure to the represented locations. However, they become symbols of childhood place attachment and memory, and people from elsewhere can easily relate to the boy having connections with his local places, in other words the presentation is not narratively pointed in the sense of special information for a select audience. The buildings and setting are recognisably special from a child's point of view no matter the viewer's familiarity with the landmarks.

## 1.3.3. Times Square New York, NY

In her *Stopmotion Photowalk* – *Times Square* (Cross, P., 2012) Petra Cross not only documents some of her friends in a section of the popular New York City square, but she visualizes aspects of the sense of place of this experience for viewers. Presenting the energy, colour, and vibrancy of the area, even during the rain. Cross's work is not properly described as stop motion

animation—as the interval and position between frames makes no attempt at the continuity of motion normally aimed for in stop motion. To be sure sometimes movements of stop motion subjects are somewhat larger than can be accommodated as smooth motion, and this is an effect that her work approaches, but is different from. Her imagery is photographic of natural subjects rather than constructed ones. This means that there are two sources of movement for her subjects, the first being the subjects' own movement, that is if they are a person or animal and are moving themselves or an object such as water responding to forces such as gravity and pressure, the second source of movement is that of the photographer's vantage point, or the camera. The movement of the camera combined with the realism of the photographic imagery adds an element for the viewer of immersion that is somewhat different from that experienced in both time lapse photography—where there is typically an extreme manipulation of elapsed time, and stop motion.

Her coining of the term 'stopmotion photowalk' to describe this process, communicates in the first term that there are selections or manipulations of motion at intervals and in the second term that these are achieved by photography of a subject and the photographer's movement. The form of the 'walk' is thus revealed by the viewer's immersion in the point of view of the camera.

Cross's work encourages a sense of spatial immersion, especially sections such as the reflected American flag in a sphere at sixteen seconds in and again at twenty-two seconds in, where the subject is not moving of its own accord, but the photographer moves around the subject, giving us a deeper sense of spatial immersion from seeing different sides of an object, with the background cues affecting perceived motion as well. The choice of the repetition of the reflected American flag, as well as showing a young girl with a tourist statue of liberty foam hat underline, the quintessentially American culture of New York, as exemplified by Times Square.

Presenting a fun, electric, and vibrant space in Times Square the soundtrack is credited to Sputnik Booster, who describe their music as 'electro-trash' based on the soundchip characteristics of video game electronic music such as 'commodore c64, Nintendo, Game Boy and Atari' (Sputnik Booster, 2015). The

music aesthetically accommodates the Times Square neon and electric signage, as well as the timing of the film and action.

## 1.3.4 Dunwall, fictional game world

In the video game *Dishonored* (Arkane Studios and Bethesda Softworks, 2012) the creators have based their adventure in the fictional city of Dunwall, which exists in a video game world dependant on whale oil as a primary fuel. In the world depicted in the video game, whale oil has been industrially modified to allow its use as power source for weapons, wholesale generation of power for nations etc. along the lines of natural gas and other petroleum products, used to generate electricity. This visualized world utilizes historical and natural history as reference material to create a game with entertainment goals. There is no need in this totally fictional world to conform to references beyond maximising artistic impact within the game world. Depicted in the game is a fantastical view of what is termed a 'whale slaughterhouse' in the fictional world—incorporating a lifting harness for the whales. In the game (as opposed to historical fact) whales are alive whilst brought into the slaughterhouse, a torturous and unpleasant experience for the living being portrayed in the game.

In this case there is no defined cultural heritage to stay true to as a form of dissemination, but rather the artists are free to use references from the past, and their own invention and fantasy, to limn a fictional world.

Far from senselessly exploiting the dark history of whaling for no end, the video game creators have chosen to build into their world areas where the player must confront the dark truths of how the fictional Dunwall obtains its power.

### 1.3.5 Barrow, Alaska

Jonathan Harris presents a non-fictional approach to the subject of whaling in *The Whale Hunt* (Harris, 2007). In this web-based application, Harris times the frequency of photography to an imagined heartbeat, with moments of high adrenaline receiving more photographic coverage (more frequent snapshots). In this way he documented a traditional whale hunt by Inupiat Eskimos in Barrow, Alaska and then developed an interactive framework for the viewer to experience the story by "...extract[ing] multiple sub-stories focused around different people, places, topics and other variables" (Harris, 2007).

The presentation of the actual whale carcass in *The Whale Hunt* is perhaps as graphic (or more so) as that of the fictional one in *Dishonored*. However, the intent is much different—as the game designers are free to diverge from a documentary approach—whereas Harris is providing photography of a real-world event linked to an indigenous people's exercise of their right of traditional hunting. His framing of the story's presentation allows for acknowledgement of "adrenalin" based reactions, acknowledging the visceral reactions that most people would have in this circumstance. Interestingly, these reactions can be attributed to repugnance in the case of those opposed to the whaling, and perhaps excitement at the culmination of a hunt by those who would support it.

### 1.3.6 Vancouver

The National Film Board (NFB) of Canada—an internationally renowned organisation producing innovative animation, films, and new media—have experimented with creating content for tablet and smartphone. Many of these projects are located somewhere within the contextual extremes, from fictional real-time gaming to new media presented documentary, typified by Dishonored and The Whale Hunt respectively. In Circa 1948 (Douglas, 2014) the NFB has joined with the artist Stan Douglas in order to recreate two historical Vancouver communities in a digital interactive form. Douglas in interview (Farago, 2014) refers to his work, "There's more truth in the lie than in the documentary." He goes on to elaborate regarding Circa 1948 that "It's not a game. It's a narrative. There's no task: You're not told to find this, kill that." Despite a fictional, narrative approach to the content in the interactive art app, the background—the historical communities that make up the setting—is painstakingly recreated and rendered to a highly detailed level of fidelity for a real-time environment. The user navigates through the environment and comes across objects that are illuminated, these objects can be selected so that they will play audio from actors portraying fictional characters based in the historical city as they relate heritage information. The user can continue to navigate around the area covered by the audio clip while the mini-story unfolds, in the setting there is a ghostly effect of illuminated, amorphous silhouette shapes that move around the spaces representing the population at the time of the story.

#### 1.3.7 Canadian woods

Another work from the NFB, *The Last Hunt* (Mendes, 2013) utilizes a text-based story about an elderly man, who relates stories from his past through his grandson's written voice and photography. They go out in the wilderness together on what would be the grandfather's last hunting trip. The interface requires the reader to swipe or scroll to advance the text. Animations, photography, and audio are all triggered by the advancing text and mesh together to create an immersive experience. The interface further allows side gallery viewing of extra content related to the stories.

## 1.3.8 Hafod-Morfa Copper Works, Swansea Valleys

The earlier examples contrast with what can be noted as a good example of a visualization for industrial archaeological purposes in the *Hafod-Morfa Copper Works* (ThinkPlay, 2012). This animation presents an eight-minute, straightforward and historically-based computer visualization, and is narrated to explain the industrial site and machinery as they are shown. The approach is one of high fidelity to historical records but has eschewed any narrative approach or arts based visual development of the cultural heritage and the visualization of a sense of place does not appear to have been a goal of the sequence.

### 1.3.9 South Georgia Island

Turning from examples drawn from a variety of places, we can look at some of the representations of the South Georgia Island whaling stations remains and how the public can view them other than in person.

### 1.3.9.1 Geometria

A programme of laser scanning captured point cloud information of the whaling station structures at a high level of detail, as well as corresponding textural information. Commissioned by the GSGSSI, this data will be archived at the British Antarctic Survey (BAS) Cambridge. This project captures the state of the remains on South Georgia at a point in time at sufficient resolution to effectively act as digital preservation of the sites. The New Zealand based company, Geometria, performed the survey over two seasons, completing the scans in November of 2013. Data from these scans was purposed into an interactive application installed in kiosks at three museums: the Fram Polar

Expedition Museum, Oslo; the Whaling Museum, Sandefjord; and the South Georgia Museum, Grytviken. The kiosk allows the viewer to use a touch interface to fly through the remains, and interactively allows touch zooming and positioning to explore the remains. The interface allows access to archival photography and film clips about the site, as well as interviews with former whalers. An online video promoting the kiosk is available to view as a demonstration (Whaling Stations of South Georgia - Interactive App, 2016).

## 1.3.9.2 Centre for Remote Environments (CRE)

The CRE at University of Dundee, has released a free educational app titled "The Island of South Georgia", (Centre for Remote Environments, 2012). This app incorporates selected photographs from the Island, 360-degree panoramas, and text information on the Island. University of Dundee has published this app for both iPhone and iPad.

### 1.3.9.3 GSGSSI

The Government of South Georgia and the South Sandwich Islands operates two live webcams situated at King Edward Point research station, with updated views every three minutes(GSGSSI, 2017).

## 1.3.9.4 Google

In February of 2014, Google sent a photographer equipped with a walking rig of their 'street view' camera set-up to Grytviken to take detailed photography to be accessed on their popular platform, Google street view, which has recently provided for "time travel" options, with records for some areas—not SG—dating back to 2007. It is not known when Grytviken is next scheduled for street view photography updating, but there is now an easily accessible temporal record, which can form a point of reference for future comparison. They will date from 2014, if the company takes additional samples in the years to come.

## 1.3.9.5 Google Earth and Panoramio

Satellite views on Google Earth can be accessed in a similar fashion to street view, and the "time travel" option is also available here for some locations. Google Earth and the service Panoramio (from Google) also provides the ability for users to upload geo-tagged photographs—which many have done for Grytviken—and to create 3D structures using Google SketchUp. For

Grytviken the church has been roughly modelled as well as a section of fuel tanks. The programme supports 3D stereoscopic viewing for those with the hardware.

# 1.3.10 Summary

In addition to the above mentioned sources of imagery to do with the whaling stations of South Georgia there are also numerous websites collecting both video and photography of many tourist visits, as well as from people working in South Georgia. These can be found quite easily by web searching key words related to the topic on any platform website hosting video or photography, as well as the various blogs of travellers and workers. In summary of the review it is apparent that there is a great deal of information available, and also that the whaling stations have been imaged very professionally and made available to the public—via the kiosk application—utilising the data from the laser scanning and gathering together archival materials. The review of other approaches to visualizing sense of place was informative in the variety of approaches representation can take, an overly narrative or fact-based fictional approach to representing South Georgia sense of place was ruled out as a main approach while it informed an aspect of hosting a play performance within the exhibition. The development of the exhibition is detailed in Part II, Chapters Three, Four, and Five and takes up after the next section Chapter Two: Methodological approach, which articulates the theoretical positions that informed the exhibition development.

Chapter Two: Methodological approach

The approach taken is to examine visual arts as a form of inquiry based on the theories, practices, and contexts used by artists. The critical and creative investigations that occur in studios, galleries, on the Internet, and community spaces, and other places were artists work, are forms of research based on studio art practice. (Sullivan, 2010, p xix)

# 2.1 Outline description of the research approach

Ontology

Interpretivist

**Epistemology** 

Constructivist

Theoretical perspectives

Descriptive and interpretive phenomenology

Methodology

Performative phenomenology/ Art practice based research

Methods

Art practices

Prototyping/previsualization

Performative phenomenological reduction

## 2.2 Theoretical perspectives

## 2.2.1 Art practice as research

Art Practice as Research is a relatively new disciplinary approach in the international research world that is demonstrating its potential as a form of research. The fact that there are differences in approach and opinion—should make it a fertile ground for research and exploration. Sullivan (2010, p. xix) takes an approach 'to examine visual arts as a form of inquiry based on the theories, practices, and contexts used by artists.' He holds that these investigations take place in artist spaces and 'are forms of research based on studio art practice.' Sullivan maintains that art practice as research 'methods of inquiry should be located within the domain of visual arts practice...' if they are to be 'aesthetically grounded and theoretically robust...' (2010, p. 95). However, many artist–researchers take a blended approach in choosing their methods, taking up quantitative and qualitative approaches from the research areas of science and social science. These methods are often combined or mixed with studio art practices, to form individual approaches that suit the various research questions of the individual researchers. Buckley observes that 'Artists who go against the grain of what is considered research in the more traditional disciplines can generate exciting new paths of research activity and knowledge' (Buckley, 2014, p. 76). Despite the obvious strengths and opportunities to be found in hybridizing and blending research methods from different disciplines Sullivan (2010, p. 95) argues 'To continue to borrow research methods from other fields denies the intellectual maturity of art practice as a plausible basis for realising significant life questions and as a viable site for exploring important cultural and educational ideas.' Sullivan (2010, p. 95) goes on to explain that the goals of qualitative and quantitative research, aimed respectively at determining plausibility (or relevance) and probability, do not function as well in determining possibility. Possibility is seen here as relevant to '...a measure of the value of research...seen to be the capacity to create new knowledge and understanding that is individually and culturally transformative'.

In the same vein, Barrett (2014, p. 65) observes that:

Artists working with new media technologies are extending research debates about the impact of the non-human, interactive technologies, digital information and virtual space on human sensation, subjectivity and social existence. Such research goes beyond traditional paradigms and is creating new methodological, epistemological and ethical perspectives on our encounters with otherness.

Although it is understandable to borrow methods from other disciplinary areas that already have established and conventional procedures for determining the warrant of the research, validity, and rigour—ultimately the discipline of art practice as research would do well to establish its own approaches and arguments. This would allow interdisciplinary work to take place on an equal footing—rather than as a perceived methodological necessity—and without compromising researchers' goals.

As one would expect at the beginning of a new research discipline, there is a profusion of approaches, terminology, and definitions—with disciplinary agreements forming over time rather than from a pure beginning. Mottram traces the history of the UK award of the doctorate in art and design subjects into the 1970s. She links the UK expansion of research in the creative arts with the 1992 incorporation of polytechnics, the former site of the art schools, into the University structure. She observes in Australia—where an analogous change in higher education took place in the late 1980s—that there was 'a similar catalytic impact on the increased rate of development of research in the creative arts as occurred in the UK post 1992' (Mottram, 2014, p. 36). The wider international uptake has been slower, and the discipline has taken time to articulate its boundaries. Nelson (2013, p. 9) defines a terminology of 'Practice as Research' (PaR) as '...a project that entails practical knowledge, primarily demonstrated in practice' although accepting that an exegetical or text based explanation accompanies a PaR submission. The UK based Arts and Humanities Research Council (AHRC) defines practice-led research as 'Research in which the professional and/or creative practices of art, design, or architecture play an instrumental part in inquiry (Rust et al., 2007, p. 11). The writers make the point that 'the expression, "practice led" does not describe a single set of ideas about research. Its meaning varies with discipline, location

and person and it varies with the questions that are investigated' (Rust et al., 2007, p. 10). The AHRC term practice-led then seems to include many different approaches to research, this makes it into a larger umbrella term under which projects can be defined. Rolling (2010, p. 19) describes the term 'art-based' and separates it from social science based methods, 'Arts-based research methods and outcomes find their sources in diverse arts practices. As such, I disagree with [the] characterization of arts-based research as a "soft-form" of qualitative research.' How art practice as research is defined or what term ultimately finds favour, there is a community of researchers who are working towards a core definition or rationale of how these art practices work as research, how they can be used to create new knowledge. The form of research questions—that they can be expressed in a manner that practice addresses—and the methods used—that they are able to be defined in terms of practice alone and not necessarily from qualitative or quantitative methodologies—will advance all forms of practice led research.

As a new and diverse disciplinary research area, art practice as research is confronted with challenges to its status as research—that is its ability to create new knowledge. Some of these challenges are based on other disciplines having the definition of terms within their own power structures and successfully argued rationales, rather than being intrinsically meaningful to art practice as research orientated questions. Sullivan (2010, p 96) observes that 'Debates about whether the goal of inquiry is to explain or to understand human behaviour goes back at least to the 18<sup>th</sup> Century.' He (Sullivan, 2010, p. 96) characterizes early researchers as more interested in explaining human activity in terms of the way they were explaining the workings of the natural world: 'This contrasted to the belief among others that a more worthwhile research purpose was to understand human agency—the capacity to make choices and to act on them.'

Nelson (2013, p. 98) describes what such an approach in PaR can look like, as it:

...involves philosophical principles and a description of generic processes. It is distinct from the quantitative methodology (of the numerical data based sciences), and the qualitative methodology of interpretive research of the softer social sciences and humanities (in which the assumption is that social reality can only be understood through social constructions such as language, consciousness and shared meanings). Like the latter, however, PaR methodology draws upon such approaches as hermeneutics and phenomenology but places even more emphasis on enactive perception in the experience of doing-knowing...

Here Nelson is saying that PaR is related to the qualitative approaches, and while it draws down from the philosophical areas of both hermeneutics and phenomenology, he sees the difference in their application. This utilisation of hermeneutics and phenomenology, as we will see later in Chapters 2.2.2 and 2.3, are different as expressed in qualitative inquiry verses art practice as research (or performative data as outlined in Chapter 2.2.3). Sullivan attributes the assumption that the primary goal of research is to construct theories that explain phenomena to come from the desire to create cause and effect explanations, which are extremely useful in our world. However he points out that 'the use of reductive methods to try to examine and explain the complex mechanisms of human thought and action continue to prove to be inadequate' (Sullivan, 2010, p. 96). He proceeds to advance the idea that understanding can be a research outcome as well as explanation as it 'involves investigating issues that have personal and public relevance. Research of this kind is imaginative, systematic, and inclusive and includes drawing on all kinds of knowledge, experience, and reasoning (Sullivan, 2010, p. 97). His last point in this area, is that understanding allows others to act on the knowledge gained in a research project, just as explanation does. Although the idea has been stressed that art practice as research should be independent regarding its own pertinent methods, there are areas that it is adjacent to—as already mentioned, with Nelson's concept of PaR.

Sullivan (2010, p. 102) posits a framework for visual arts research that positions itself between three triangularly based points, with the dividing lines theorised as bridges rather than barriers. Where an inquiry is positioned

depends on the researcher's approach to answering their research question.

This allows for a method of identifying research position within the framework.

The three areas of research that he identifies are interpretivist, empiricist and critical theory, explained as:

Agency-Interpretivist practices (dialectical, constructivist, interdiscipline).

Structure-Empiricist practices (conceptual, reflective, discipline based).

Action-Critical practices (critical, collaborative, trans-discipline).

Within the triangular field between these positions, we find an area of:

Visual Arts practices (create and critique, reflexive, postdiscipline).

He later expands this framework of research into one of Visual Arts Practices (Sullivan, 2010, p. 193)

Ideas and Agency-Interpretive discourse (visualizing texts, narrative structures, reflecting).

Forms and Structure-Empiricist enquiry exercises (visualizing data, network structures, designing)

Situations and Actions-Critical Process enactments (visualizing problems, social structures, critiquing).

Within the triangular field, we find Visual Arts practices (visualizing ideas, liquid structures, creating).

In Interpretivism we have the philosophical belief that the social realm is not subject to the same methods of investigation as the natural world, as Sullivan explains, 'Here [in interpretivist traditions] the central is experience as it is lived, felt, reconstructed, reinterpreted, and understood. Consequently, meanings are made rather than found as human knowing is transacted, mediated, and constructed in social contexts. These views indicate that research practice itself is a site for creating and constructing interpretations as meaning is made during the inquiry process. (Sullivan, 2010, p 101)

As a precursor to the term 'empiricist', empiricism theorizes that knowledge comes only or primarily from sensory experience. As Nelson (2013, p. 49)

explains, 'Empiricism posits that knowledge of an independent reality is obtained through the objective observation by neutral researcher who infer general truths, or laws, from the accumulation of specific instances according to particular principles of logical reasoning (deduction and induction). To this history of empiricism, Sullivan (2010, p. 101) observes that:

[There is a]...mixed heritage of empiricism as a paradigm and its pervasive impact in regimes of research in the social and human sciences. The rapid growth of qualitative approaches that open sense-based strategies to practical reasoning is a legacy to the methodological utility of empiricism. So I use empiricist to reflect a general focus on research that is mostly data-driven, where evidence is derived from experience of social reality and is collected in many forms and analysed using a range of related methods and techniques.

This approach toward using of a different form of the word makes a distinction between methodologies that insist on quantitative data (empiricism) and those concerned with sensory experience that are open to both quantitative and qualitative approaches (empiricist).

Critical theory approaches research by incorporating reflectivity and critique of culture, this approach has grown out of the humanities and sociology. Nelson describes that '...an awareness of an inevitable interrelatedness between subject and object has modified the complete separation supposed between observer and observed in the classical scientific method and requires critical reflection' (Nelson, 2013, p. 53). Sullivan in his explanation of critical theory, has a more activist description where 'The broad purpose of critical forms of inquiry is the enactment of social and cultural change. Under the glare of a critical eye that breaks apart social structures that privilege those in control, the situation of groups marginalized by cultural characteristics such as race, gender, economics, or ethnic identity is examined' (Sullivan, 2010, p. 103).

In Sullivan's framework, the research questions or the nature of the topic under investigation determines the location of a visual arts research inquiry in relation to the above categories. An inquiry may contain, for example, little empiricist leaning, a great deal of interpretivist positioning, and somewhat less of an approach based on critical theories. Using this framework to describe an enquiry allows for a fuller exploration into methods for art practice as research.

By articulating that visual arts practices can fall anywhere within this framework, the practitioner/researcher is empowered to customise and blend—as well as create—methods for research.

## 2.2.2 Phenomenology and hermeneutic phenomenology

...the core of phenomenology...calls for a return, again and again, to lived experience; that it takes as its starting point a position prior to, or beyond, the subject-object divide; that it shapes a reflective process that opens itself onto the richness of pre-reflective experience; that it is inclusive of a variety of experiences and not bound to a narrow and abstracted notion of truth; that it provides scope for the many dimension of what we are as human beings to contribute to the expansion of knowledge and creation of cultural artefacts. (Kozel, 2007, p.

Phenomenology as a theoretical perspective, has a range of applications and methods depending on the context in which it is applied and from what position. It is generally considered to have descriptive or interpretive positions; however, there are commonalities of the two main approaches. The first type of descriptive phenomenology was articulated by Husserl, who saw it as a means by which study could be brought back to the things themselves, that is phenomena as we experience it, rather than through preconceptions of theory that might influence how we perceive reality. As Carman notes, 'Phenomenology is an attempt to describe the basic structures of human experience and understanding from a first person point of view, in contrast to the reflective, third person perspective that tends to dominate scientific knowledge and common sense' (Carman, 2012, p. viii). In this way Husserl's notion of the discipline was that it was essentially descriptive, and not meant to provide explanations or deduction insofar as phenomena of experience is concerned. It does not aim to construct hypotheses or speculate beyond experience itself. As Zahavi explains '... Husserl is interested precisely in the strictly invariant and essential nature of consciousness—and not in the nature of the neurological processes that might accompany it empirically...he is interested in the cognitive dimension of consciousness, and not in its biological substratum' (Zahavi, 2003, p. 13). Zahavi goes on to give the example of a withering oak tree, he notes that although something occurs inside his brain when he considers the concept of a withering oak tree, this biological activity is

no part of the experience itself of the intentional relation to the tree. Intentionality in phenomenology, describes the relationship between a subject being directed to an object and their experience of this object. The object need not be an actual one, so that for example, a child may love unicorns, here the relationship is not an actual one—but it is intentional. Intentionality might also be casual, for example if the child loves a stuffed animal, this stuffed animal has an actual existence and can affect the child's sensory organs—but both types of relationship are intentional (Zahavi, 2003, p. 148). Husserl's goal was to identify essences of phenomena that served to distinguish objects or experiences, making them unique from others. As Laverty quotes Edie (1987) discussing Husserl, 'Conscious awareness was the starting point in building one's knowledge of reality. By intentionally directing one's focus, Husserl proposed one could develop a description of particular realities. This process is one of coming face to face with the ultimate structures of consciousness' (Laverty, 2003, p 23).

Interpretive phenomenology—called hermeneutic—is also concerned primarily with human experience in the world. Hermeneutic phenomenology began with Heidegger, a former protégé of Husserl. Laverty quotes Wilson and Hutchinson (1991) as stating 'The focus [in both phenomenology approaches] is toward illuminating details and seemingly trivial aspects within experience that may be taken for granted in our lives, with a goal of creating meaning and achieving a sense of understanding' (Laverty, 2003). Laverty (2003, p 24) summarises:

The way this exploration of lived experience proceeds is where Husserl and Heidegger disagreed. While Husserl focused on understanding beings or phenomena, Heidegger focused on 'Dasein', that is translated as 'the mode of being human' or 'the situated meaning of a human in the world'. Husserl was interested in acts of attending, perceiving, recalling, and thinking about the world and human beings were understood primarily as knowers. Heidegger, in contrast, viewed humans as being primarily concerned creatures with an emphasis on their fate in an alien world.

These differences led to subtle yet important differences in emphasis between the two. Phenomenological descriptive research intends to clarify essences of experience taking place in lived existence, with attention to the structures of

experience in consciousness, this results in illuminating that which could be described as hidden from consciousness, or invisible. Hermeneuticinterpretive research, focuses on meanings of experience in culture and the effects on individuals and society. Interpretation acknowledges these historical and cultural influences as well as the researcher's position as being influenced by these factors (Laverty, 2003, p. 27). Heidegger considered this influence to be a condition of all understanding. These fore-structures cannot be eliminated and so the researcher must become aware and account for these influences as much as possible in interpretation. This led to his articulation of the hermeneutic circle, wherein interpretation moves from parts of the experience to the whole of the experience, in repeating cycles, to increase the engagement and understanding of historicity and texts. Texts are understood to include written and verbal communication, art, and music. This process may well be unending, but pauses when sensible meaning is reached and when relatively free from contradiction. (Laverty, 2003, p 24). In contrast, Husserl regarded the epoché as a process wherein the researcher could set aside biases, assumptions, and judgements about the natural world and explain a phenomenon in its own terms, or essences. This epoché is also termed phenomenological reduction, and is often used in a method called bracketing. Bracketing is meant to fix the intentionality of the object, aside from whether it is real or not, and to investigate the object as a phenomenon of conscious experience rather than in a natural way, leaving that to the natural sciences. As Laverty summarises, '...a hermeneutical approach asks the researcher to engage in a process of self-reflection to quite a different end than that of [descriptive] phenomenology. Specifically, the biases and assumptions of the researcher are not bracketed or set aside, but rather are embedded and essential to interpretive process' (Laverty, 2003, p 28). The concept of data in phenomenological or hermeneutic studies can incorporate a wide definition, as Polkinghorne points out, sources can include the researcher's personal self-reflections from experience, participants who have had the experience and can be questioned in writing or speech, and 'depictions of the experience from outside the context of the research project itself, including the arts...' (Polkinghorne, 1989, p. 46). These depictions from outside the research project, can in the case of an artist-researcher, with the

requisite experience, be from within the research project. Typically, phenomenology—whether descriptive or interpretive—is considered a qualitative form of research. In the next section, we will explore the concept and possibilities of performative research and note parallels with the ideas of phenomenology and hermeneutics.

### 2.2.3 Performative research

True reflection presents me to myself, not as an idle and inaccessible subjectivity, but as identical to my presence in the world and to others, such as I currently bring it into being: I am everything that I see and I am an intersubjective field, not in spite of my body and my historical situation, but rather by being this body and this situation and by being, through them, everything else. (Merleau-Ponty, 1945, p. 478)

The idea of performativity in art practice as research allows us to conceptualize a way to expand upon the existing paradigms of quantitative and qualitative research. The performative is unrelated to typical usage of the word performance—as in an entertainment put on for the public—but deals with the symbolic creation of intentional representations that have their own effect in the world. Haseman explains the difference between ideas of quantitative and qualitative research as opposed to performative by clarifying that it is "...expressed in nonnumeric data...in forms of symbolic data other than words in discursive text. These include material forms of practice, of still and moving images, of music and sound, of live action and digital code' (Haseman, 2006). This interaction between artist and materiality forms an investigation as well as a way of investigating. Bolt traces the idea of 'handlability' to Heidegger, and maintains that handlability underpins material thinking and requires us 'to focus on the unique form of 'sight' or circumspection that makes creative arts research distinctive' (Bolt, 2010, p 33). Bolt goes on to contend that there is an added dimension to the physical artwork that constitutes creative arts research, 'it is art as a mode of revealing and as a material productivity...much more concerned with articulating what has emerged or what has been realized through the process of handling materials and ideas, and what this emergent knowledge brings to bear on the discipline' (Bolt, 2010, p. 34). For Bolt the exegesis is key to not only expressing these added dimensions contained in the creative arts research but as a means of reflection through text for the

artist/researcher. In the view maintained by Haseman (2006), these artefacts created by the artist are performative in their own right. Similar in the way that quantitative data can be read on its own, but generally the significance of the data is expressed and discussed in written form, with conclusions drawn beyond the appearance of the quantitative data itself. Haseman explains (2006) that 'In this third category of research—alongside quantitative (symbolic numbers) and qualitative (symbolic words)—the symbolic data works performatively. It not only expresses the research, but in that expression becomes the research itself.' This expression of the research in the creative artefact does not necessarily contradict the need for writing or further explanation apart from the work. Bolt (2010, p 30) clarifies that:

Words may allow us to articulate and communicate the realisations that happen through material thinking, but as a mode of thought, material thinking involves a particular responsiveness to or conjunction with the intelligence of materials and processes in practices. Material thinking is the logic of practice.

The notion of the performative originated with words themselves and language, Austin observed in a series of lectures that certain words are not merely descriptive of events, but perform actions in the world, they are performative. He included in this category the famous example of saying wedding vows, as these utterances perform a change in condition (becoming wed) and do not just describe a change (Austin, 1975). Performativity came to be appropriated to describe some practice-led research through first being used by feminist philosopher Butler (1988), who von Hantelmann (2010) relates:

[Butler] holds onto the reality-producing character of language, but instead of the individual speaker, who for Austin is the central authority, she stresses the power of social conventions that empower the speaker but also relativize the impact of the individual on the impact of the individual's intentions. A performative act, for Butler, produces reality not by virtue of will or intention, but precisely because it derives from conventions that it repeats and actualizes

In her analysis, von Hantelmann extends this concept of repetition and actualization of conventions to the performative in art, 'The model of performativity points toward these fundamental levels of meaning production.

It puts the convention of art's production, presentation and historical persistence into focus, shows how the conventions are co-produced by any artwork—independent of its respective content—and argues that it is precisely this dependency on conventions that opens up the possibility of changing them' (von Hantelmann, 2010, p19). Haseman (2006) stresses the importance of the symbolic form of art works in that they provide a focus for the performative researcher in conceptualizing ideas about aspects of reality, and of communication to others. This occurs in the dependency on convention of art's production that von Hantelmann pointed out earlier. She claims that 'Art's performative dimension signifies art's possibilities and limits in generating and changing reality' (von Hantelmann, 2010 p 18). She clarifies that exploring the performative in art is not about creating a new class of artwork, but that 'it involves outlining a specific level of meaning production that basically exists in every artwork, although it is not always consciously shaped or dealt with namely its reality-producing dimension' (von Hantelmann, 2010 p 17). This reality producing dimension of performative research, creates a casual intentionality—in the sense of an impact on the sense organs from our earlier phenomenology based definition. This intentionality is a representation or a symbolic construction in the form of an artwork or exhibition through which the original phenomenon can be better understood in the practice of the researcher, and then communicated.

## 2.3 Methods for performative phenomenology

To successfully propose performative research as a third research paradigm, it is essential to answer the test [framed by Lincoln and Denzin] of all disciplined research methodologies: What are the "bundle of skills, assumptions, and practices that the researcher employs as he or she moves from paradigm to the empirical world?" (Lincoln & Denzin, 2005, p. 25) in (Haseman, 2006)

Taking into account the hesitation expressed in Chapter 2.2.1 to borrow research methods from other fields and apply them for art practice as research, this thesis project adapts phenomenological research methods, as espoused by Moustakas (1994) for human science. These practices rest primarily on Husserl's work in formulating descriptive phenomenology, but in adapting them to art practice as research the relevance of Heidegger's points as raised through hermeneutic (interpretive) phenomenology is considered, especially as regards the ideas of interpretation with the performative work, considered as a 'text'—via this exegesis. The affinities between phenomenology and art practice as research make correspondences possible—rather than a direct translation of methods into a performative arena from the qualitative. Where the primary tool of phenomenological research would be qualitative analysis of language—the performative phenomenological research approach here is one of analysis of visualization and representational outputs informed by the situated reflection and reflexivity provided in practice and making. See Table 2 for descriptions of performative correspondence against qualitative phenomenological methods.

Table 1. Performative phenomenological methods and phenomenological reduction		
Phenomenology Research Methods	Description	Performative correspondence, if applicable
Epoché	Setting aside prejudgments and opening the research with an unbiased, receptive presence	
Bracketing	Identifying and setting apart the topic or question	
Horizonalization	Identifying thresholds of understanding, valued equally	Partially through practice, prototyping, reflection
Delimited Horizons	What stands out as invariant qualities of the experience	Through practice, refining of prototypes, reflection and handlability
Invariant themes	Non-repetitive, non-overlapping constituents clustered into themes.	Organizing the practical work into themes, clarifying aspects of work
Textural descriptions	A descriptive integration of the invariant textural constituents and themes (obtained through experience)	The material work becomes the textural description data, which is then explicated in writing
Imaginative variation	Vary Possible Meanings Vary Perspectives of the Phenomenon: From different vantage points, such as opposite meanings and various roles Free Fantasy Variations: consider freely the possible structural qualities or dynamics that evoke the textural qualities	Varying the work in the exhibits, various attempts and interpretations, different modalities and representational strategies
Structural qualities	Underlying and precipitating factors that account for what is being experienced	Reflection/reflexivity on exhibition
Structural themes	Viewed through possible structures of time, space, materiality, causality, relationship to self and others, etc.	Reflection/reflexivity on exhibition
Synthesis	Essences and meanings of the phenomenon, arrived at by integrating the textural and structural descriptions	The final exhibition, also the exegetical text

Table 1. Columns 1–2 adapted from text in (Moustakas, 1994, p. 180–182)

# 2.3.1 Epoché

The impetus behind this research project was to produce work and undertake research that would 'enable a wider public understanding of the historical context and cultural heritage of the whaling industry of South Georgia Island.' To fulfil the remit of the assignment taken up, reflection and consideration of options led to research on place and sense of place. This followed from research and study of the South Georgia Island history and the direct experience of living there among the ruins. A review of different approaches to communicating and representing place revealed many options for proceeding, as well as considering the existing projects and outputs regarding the South Georgia whaling history. Important in the concept of the phenomenological epoché, is to resist assumptions about proceeding and blind acceptance of common-sense seeming beliefs. A prime observation arose that personal connections to place, achieved through or expressed by sense of place formation, is a profound factor in a wider public consideration and incorporation of historical context and cultural heritage. Further reflection on the unique characteristics of South Georgia led to awareness that sense of place—normally taken up most strongly by those with a high degree of rootedness—is encountered in South Georgia as a subsequent place attachment, never a primary one, due to its lack of a permanent settled population.

### 2.3.2 Bracketing

Following these reflections, experience, and research—the primary research question of the study was articulated as:

What would constitute an appropriate form of visualization practice for the artist/researcher as a newcomer to the South Georgia history, to enable a wider public understanding of the historical context and cultural heritage of the whaling industry of South Georgia Island?

The above question is the primary research question, and a related question was identified dealing with the visualization practice approach to the project:

What new practices of visualization emerge from the attempts to answer the principle research questions about visualising Sense of Place in South Georgia abandoned whaling stations?

## 2.3.3 Subsequent methods and their locations in the text

### 2.3.3.1 Horizonalization

The process of horizonalization, identifying thresholds of understanding of the phenomena under investigation, takes place in Part II, Chapters 3, 4, and 5 in the visualization practice for the project. The various components of the resulting exhibition reflect this process in their development and the text communicates this process, which can also be taken as the delimiting of horizons. In delimited horizons—what stands out as the invariant components of experience are identified in practice—this results in the final pieces selected for exhibition developed through processes of prototyping, previsualization, and reflection on their development.

### 2.3.3.2 Invariant themes

As ideas develop in practice these delimited horizons become organized into invariant themes, this work is charted in Part II, Chapters 3, 4, and 5—according to each exhibit selected to be part of the exhibition.

## 2.3.3.3 Imaginative variation

Imaginative variation takes place in practice as well, this involves the processes of varying the work in the exhibits, various attempts and interpretations, the choice of different modalities and representational strategies that culminate in the final pieces.

#### 2.3.3.4 Structural themes

The work created for the exhibition has been divided into three structural themes as reflected in the titles of Chapters 3, 4, and 5 and identified in table 13, Chapter 6.2.2 Structural themes

2.3.3.5 Textural descriptions, structural qualities, and synthesis.

The identification of textural descriptions, structural qualities and their synthesis are covered in Chapter 6.2.1. This synthesis is then purposed in the Conclusion 7.2.

In Part II Research, Chapters Three, Four, and Five serve as the first-person account of the development of the various components of the exhibition, as well as the raw data from reflection around the processes of making and

experiences on South Georgia. These accounts—as well as the exhibition itself—serve as the source of raw data for the phenomenological reduction.

## Part II Research

Chapter Three: Representations of walking and visualization



Illustration 3. Drukken Villa residents, photo by Anthony Smith

Part of the culture of those who work on the island, is to take advantage of the opportunity to explore the stunning scenery on South Georgia. This is often part of the motivation for agreeing to take on a contract of limited employment, and hearkens back to the days of whalers who in a time of more limited travel, journeyed to the opposite hemisphere for employment, but perhaps also for the adventure of seeing the other side of the world.

#### 3.1 Introduction

The journey to Grytviken from Dundee, Scotland is an experience of reaching one of the most remote locations on the planet. The state of mind invoked by the approach to South Georgia hearkens back to earlier forms of transportation with a number of legs of travel before the destination is reached. From trains to coach to airplane to ship, the connections require layovers and logistical coordination, as there is no regular service of any commercial transportation to South Georgia. The last leg of my travel to the island took longer than a week and was arranged on the chartered South Georgia fishery patrol ship, the Pharos. Prior to the sea voyage, I reached the Falkland Islands via a military flight from the Royal Air Force Brize Norton station, staying in Stanley whilst waiting on the Pharos to call in to port. The eventual return journey took somewhat longer due to rough seas aboard the Royal Navy's ice patrol ship the HMS Protector. The decision was made to exclude representation of the travel experience within the exhibition; however, it is worth making a note of here. The experience of reaching the remote destination conditions later experience as well as influencing reflections on what constitutes 'authenticity' in arriving at a true representation of the island.

Our first landfall at South Georgia was a side trip to a remote beach before landing at our destination of King Edward Point. This beach was an area at which the Habitat Restoration (HR) project—introduced in Chapter 1.1—had left barrels of fuel staged at different locations on the island so that the helicopter crew could efficiently spread rat and mouse poison pellets. These empty barrels were then to be collected by GSGSSI operations as the temporary staff for the HR Project disbanded. As we approached the island we were contacted by radio and the request was made that we make a slight detour to corral fuel drums that had gone roving. The empty fuel drums had been staked down the previous summer, but these moorings had worked loose in the changeable seafront terrain that South Georgia beaches are characterized by. Melt streams from the inland snow and ice meander down to the ocean and shift position, an effect I was later able to see in whaling station contexts. The ship neared the beach but wind speed coming off the beach was too high to be able to go out in the boats and we waited on the vagaries of

SG weather. This was an early indication of what would become a common pose of listening to the conditions of SG for permission to embark or land.

The fur seals were in full mating season at this time on the beach; harems of multiple females to a bull staked out territorial claims on the beachfront in an elaborate and nuanced hierarchy of space. These harems abutted one another closely, and although care was taken to not disturb fur seals, there is a knock-on effect from human movement. The aggressive nature of the bulls was unexpected, and I was grateful for the experience of our fellow travellers. As we navigated the landscape doing the necessary work of gathering the errant large metal drums, I was introduced to the strange scales of experience in South Georgia. Rolling the large rusted fuel drums across what felt like great distances in the uneven terrain and pooled icy water, my leather gloves began ripping and fraying out at the seams. It became evident to me that they were in fact fashion gloves, and not suitable to work of this nature. They held together—just—while the under-gloves of cloth that I wore quickly became soaked through. My expressions of discomfort to the group inspired stories from a more experienced colleague of the frostbite damage that he had suffered on another expedition, resulting in permanent nerve damage. Later ensconced in warm, comfortable accommodation at Grytviken and mending the split seams of my leather gloves with needle and thread, I could revisit and reflect on the memories of our first landing.

With this first temporary landing on SG, I began to grasp many themes that would come back to me once settled at Grytviken. The themes of communal safety and risk assessment in the face of the uncertainty of the weather and environment, the extreme beauty of the land and seascape alongside the rusted artefacts of industrial activity, the SG flora and fauna, the roles of 'greenhorn' and experienced expeditioner, the collective group endeavour and organisation alongside the contrast of a readily available isolation. These conditions flow from what South Georgia is in its remoteness in the seas of the Antarctic Convergence. My research is to do with the structures that were erected and worked in the same conditions—the former whaling stations.

As we eventually made our way to Grytviken by leaving this beach, we passed through the long beautiful passage to enter King Edward Cove where the

station and museum inhabitants greeted us at King Edward Point (KEP). From our mooring at KEP, Grytviken was just visible in the distance, a rusted-out landscape interspersed with remarkably intact buildings that already communicated a welcoming and warm feel. Already briefed on the procedures to prevent bio-contamination, we went through the procedures of dipping and scrubbing our boot soles and checking through our luggage for seeds, insects, rodents, or other unauthorized passengers. We were then settled in accommodation.



Illustration 4. King Edward Cove, Photo by Simon Browning

I had travelled from the Falklands with one of my new housemates, and I met the remaining three upon moving into the accommodation at Grytviken for museum staff. This was a building that had been renovated and had formerly been the foremen's barracks when the station was operating. Another name for it was the 'Little Villa' as it was adjacent to the former station manager's residence, which was known as the 'Manager's Villa' and housed the Museum. The Little Villa was also known as Drukken Villa, Drukken is Norwegian for 'Drunken' and humorously referenced the envied situation of the foremen, who as managers were allowed alcohol at the station, whereas the common worker was not.

After unpacking, attending a communal welcome dinner at KEP for all the new arrivals, and a good night's sleep ashore, I settled into life at Grytviken. There were communal chores and activities at the Little Villa, an office area in the Museum administrative space, social trips and training at KEP around the cove, and I began a programme of photographically documenting the sites at Grytviken. I had access to the Museum's specialized library of books and the exhibits themselves, and conversations with Museum staff and experienced visitors in about the Island were invaluable.

It was here at Grytviken that I became free to walk on my own inside the single person travel area—which included the station—I could for the first time in weeks of preparations, travel, waiting, and settling-in; be able to form my own schedule and agenda for investigating the site. Relating to place on foot has a special significance, especially in a landscape such as South Georgia where there is only one road, if a stone and mud path can be called that, and one vehicle—an old but well-maintained Land Rover. I began photographing the buildings of Grytviken and the sites with remains of buildings, and in some cases just the former site of a building. As I settled into the life rhythms of the station, I began to relate to the ruins that I was investigating.

# 3.2 Photogrammetry Walks, Grytviken



Illustration 5. Photogrammetry Walks, photo by Kieran Baxter

In this image the artist-researcher's position is captured within a point cloud reconstruction of the Grytviken station viewed from overhead. The multi-coloured dots show where an individual photograph was taken, forming the path of the artist's roughly circular motion around a site on his various walks

Originally an aspect of my planned approach to this project was to recreate the ruins of Grytviken in 3D computer animation models and thus in anticipation of this goal I commenced photographing the buildings from every angle, terrain allowing. This approach allowed for a detailed record of the buildings at high resolution from all reachable angles of view. This could then be used as a reference for modelling the computer meshes. Textures or surfacing details could also be sourced from the photographs, enhanced in an image manipulation computer programme and then mapped onto the computer model. As one step of this computer animation modelling intention, a process called photogrammetry could be used to create draft meshes directly from the photographs, provided they contained enough views of the subject. The process involves taking overlapping photographs by rotating in a circular path around a subject, with the subject as the centre. In practice, an ideal circular path is not possible due to constraints of the site, for example another adjacent building or terrain feature, or even in some cases a creature—such as a large elephant seal taking a nap-means this perfect, ideal circular path must be deviated from.

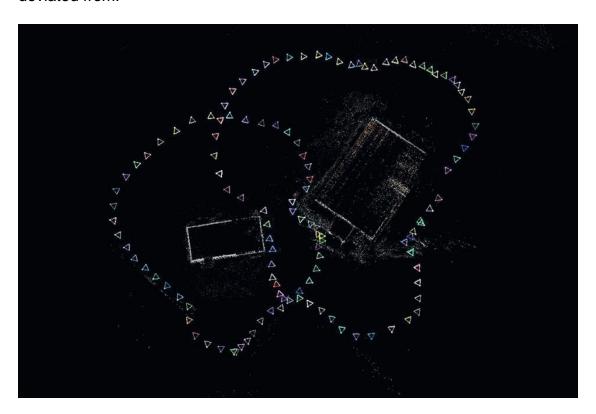


Illustration 6. Photogrammetry Walks, detail i

Another reason for imperfections in these less-than-perfect arcs is that these walks—as I will now term them—are taken in an organic way. There was no chalked outline to follow, one step informed the placement of the next. In approaching a subject, I would mentally project a 'centre' for purposes of orientation to the site's mass or spatial area—which in many cases was irregular—and then would frame the view of the building accordingly before taking the photograph. From this starting position I would shuffle about a sidewise step and a half, adjust the framing of the subject and proceed to the next. Looking at the results of this organic process it is remarkable to note just how on point the method was in the positioning and regularity of the arcs that formed naturally around impassable features. Photogrammetry software works by calculating positions of the observer in a photograph and various points of the subject, calculating these across multiple photographs and then combining them. This gives all the observer positions as well as a built-up subject of sampled points on the subject's surface which defines a point cloud, from which can be manufactured a digital surface.

This photowalk process could take quite a long time depending on the size of the area being photographed and I learned that it was important to make a mental note, or leave a marker—such as a rock—in the starting position. A rhythm was developed in the patterned movement and picture taking that was active yet relaxing, invoking an almost meditative state. This process also allowed me to spatially build up an image in my mind of the various spatial features of the building and site, and really know it well over time.



Illustration 7. Photogrammetry Walks, detail ii

As this process continued over many weeks, I became interested in being able to share the walks that I was taking in a visual way that reflected the process of taking the photographs, as well as compressing the time that it took to complete photography for the site. I wanted to achieve an image that reflected my mental processes in capturing the subjects and that showed my presence in the site. These attributes of the image can be described as digital traces. I also desired an image that captures real data about the spatial features of the buildings, ruins, and my position within that landscape over time. Waiting on weather conditions to be acceptable—a typical South Georgian necessity—plus the sheer number of ruins and the complexity of the Grytviken site, meant the project took several months to build up. I was still photographing shortly before I left the island. Through this method I achieved a photographic archive of documentation of the whole site that is impressive in scope. The photography served not only to create this exhibit piece, but also provided source imagery for the rest of the works explored in this Chapter Three.

One observation from the process, was that sites that I captured early on in my residency changed toward the end, the site was altered due to maintenance, repairs, and weather. Conceptually I knew as well that the site was constantly changing in small ways that were not overtly noticeable. When one begins

closer observation, the divisions break down into finer grades of distinction. I chose to preserve a representation of the 2013–14 Austral summer, rather than a work that focuses on the fine distinctions of temporal change, although this is an implication of the work. In Grytviken, like all places, nothing stands still. Everything is changing minutely all the time, and of course there are times of great or accelerated change, such as those that would happen in the case of an avalanche or a construction project, for example. A complication with a site such as Grytviken that wishes to preserve cultural heritage, is that there is a question as to which past—what state, should be preserved or presented? We must consider our intentions, goals, and the authenticity of the site when making these decisions. I have represented the station as I encountered it, looked at as an archival documentation that has value as a record of the past at the time I was there at the station, and it incorporates singular moments in time, but over a defined period. In effect it condenses several months of my physical time and movement into one visual and spatial representation as seen in Illustration 9.



Illustration 9. Photogrammetry Walks

An aspect of *Photogrammetry Walks, Grytviken* for me is that it marks my status as a Grytvikener, or South Georgian. Being able to see my movements from an artificial vantage point in the geographic space and over time is

gratifying, but also useful for providing an added context to engagement with place, as the subject whose experience has been captured in a coded experience through this representation. Examining these digital traces can evoke memories for me, I can relive these walks in my mind's eye. Although for me it is a personal reverie, people relate as an audience through their own imagined movements and points of view. The image can serve as an inspiration for them to think about their movements in space and time. The image itself preserves this organic rambling effect that we make through the places in our lives; outside of the image the darkness is not illuminated, it is unknown. At points in human history map makers would illustrate these places perhaps with dragons, krakens, fantastical beasts that represented the unknown, the unexplored. If I think of what this map does not show—of my journeys before and after Grytviken—linked in ever widening circles of illuminating light and knowing, the blackness is inviting. The background and medium for a glittering web showing movement and intention across time and space. If there was a particularly brilliant occurrence—perhaps those places we return to time and time again—in sweeping waves of discernment illustrate change itself.



Illustration 10. The photowalks minus the photogrammetry reconstruction

The way we look at things we encounter—when seen in a form like this—is revealing. Planning for movement does not eliminate the improvisational flourish encountering an obstacle. From this viewpoint and visualized in this way the obstacle and the path form an integral shape, interlocking puzzle pieces that form a complementary whole. The method of collecting, determines the final form, resulting from a digital process. Extended time and experience in a wide space becomes a collection of visible traces, gradually built up marks that can be seen all at once and examined.

## 3.3 Photosynth Walk



Illustration 11. Photosynth Walk, photo by Kieran Baxter

Fifty-one minutes and five seconds running time.

This audio-video work pictured in Illustration 11, in the screen on the left of the photograph, has been created by processing the source photography, digitally creating the effect of video from individual photos. Glitches and artefacts call to mind the impermanence of the site and create a visualization of the patchwork of memory from fragments.

Shifting away from a simultaneous effect of extended time collapsing into a single image in the previous work, I wanted to convey the actual imagery from the walks in something that gave the feel of real-time discovery, as views reveal themselves in a natural sequential manner, unfolding. I wanted to maintain the contextual adjacency at the sites and buildings, the way the ruins are interlinked and readable themselves as the organic outgrowth of putting a building in one spot, then developments and new buildings going up related to functions of the station. The visual aspect of the point of view is important as well, that it traverses these paths around and between the sites and structures as revealed in the photography.

In a technology that uses similar algorithms as photogrammetry, the nowdefunct online service Photosynth (Microsoft, 2017) describes a technique of point cloud reconstruction and photographic mapping of the source photos that results in a temporal, stitched artefact. Very different than looking at serial photographs, this technique prevents an artificially smooth camera track of the walks, with an illusion of three-dimensionality. This technique uses the photographs themselves, stabilising them according to an algorithm, and blending the photographs together in a way that creates a spatially charged and dynamic effect. It is akin in some ways to filming a video around a subject, but there are glitches and imperfections in the blending that create distortions. Also as the footage is stabilised, it creates a smooth, gliding, and unearthly feel to the footage. At times the image can break apart totally only to come back together again. Running all the images of the sites through the web based application involved pre-processing the photographs for colour correction of the various lighting conditions on a given day and in different amounts of shade or full sun depending on where the viewpoint moved. Some shots would cause the application to be unable to process the shot, these failures could usually be traced to an artefact in a photograph that was too large of a jump for the software, or was just problematic. These faults could usually be eliminated so that the sequence could be calculated. All shots had to be processed per subject, then a movie file of the output was downloaded, and the final film edited together to create the entire sequence. Audio from whale song (Mellinger, n.d.), slowed down at various speeds make an effective soundtrack to the visuals. Timing of individual sequences was adjusted in

editing software but generally the timing was informed more by the spacing of the original photography and subsequently, how the photosynth algorithms interpreted this spacing.

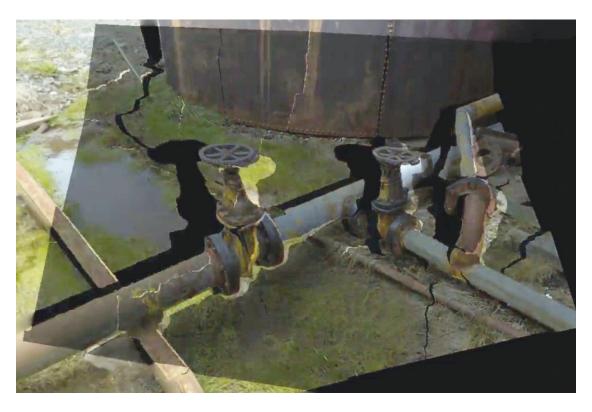


Illustration 12. Still from Photosynth Walk i

During the gathering of images for the walk I could usually take photographs when the site was free from human visitors, but occasionally I would take photos around visiting human subjects, thereby excluding them. For example, I might take a series of photographs centred on a subject and then a pedestrian would walk into the shot. When this sort of interruption occurs, I pause in my photography—taking care to not express impatience or being troubled with my body language and manner—and wait for the pedestrian or group to pass. In this way the effect in *Photosynth Walk* presents a slight distortion in that it is de-peopled, so to speak. The effect is satisfying for me as it presents Grytviken as an otherworld, a slightly unreal place yet photo-real at times. Time proceeds in the artefact in a manner that people usually see as linear and straightforward; however, the view I created advances through being compressed in a way that takes us through the station in approximately an hour's time. To walk in the footsteps of the paths that I made around the station would take much longer even without the numerous pauses to take a photograph. Despite this temporal acceleration, the film does not feel like a

sped-up film at all. There is a certain distance achieved that is outside of time, a floating-ness that morphs the viewer's visual journey along at a dream-like pace. The effect achieved for someone who has visited South Georgia, according to couple attending the exhibition, was 'It's like being there again.' Of course, the same can be said for looking at static photos of a holiday. However, the manner that the couple expressed in these sentiments had something to do with the wonder of the actual place of South Georgia. In their faces was the expression of remembrance, a type of relocation within their minds to experience again—in a way that I feel is linked to spatial memory—their actual being when they visited the exotic and unique site of South Georgia. For the virtual tourist or person viewing the film who has not spent time on South Georgia, this piece provides structural and site details of the station in a visual way—recreating my walks—that promotes the visualization of the site for the viewer.

Visualization, is also about the mental activity that incorporates space into a mental object, an inner representation that is exemplified by the ancient traditions of an assortment of mnemonic techniques known by such names as the Art of Memory, Method of Loci, and Memory Palace (Cicero, 1954) (Yates, 1992) (Foer, 2012). These techniques and others like them are thought to work by targeting our ability to remember—in sometimes astonishing detail environments that we have become familiar with (perhaps we could say acquired a sense of place for). For those who have not already used these techniques; if you take a moment to think of your childhood home you will find that you are able to remember features of rooms, furnishings, and the layout in detail. If you take the time to reconstruct this environment by mentally walking through the memory home from the front door, through each room in turn and then exiting, you will find that the more time and attention you give the construct the greater in detail it will grow, and that you will be surprised at the amount of detail that can be remembered. Our memories have a special affinity for remembering these types of spatial details without any conscious effort on our part, much different than our ability to memorise numbers or other types of information. The techniques of the Art of Memory work by linking information that is more difficult to remember with this spatial information that we can recall vividly. This vividness of mental imagery ranges on an individual basis, but most people do have a comparative strength in recalling spatial information.

Photosynth Walk functions as both an evocation of mentally stored spatial information and as an initial source material—in the case of not having visited the station in real life—which would be the case for most, but not all the audience. In this way the piece serves an important function in the exhibition, overlapping with the other pieces it provides a base for other sensory experiences to be conflated or bound with. In the Art of Memory, we use our imagination to visualize mental images that can then be situated in the remembered spatial environment, already held in the mind's eye. In this exhibition the function of phantasia—or recreated visual imagination—is instead reiterated in the various other exhibits, so that there is a meshing of spatial reconstructions and the other senses. The subjective fragility of this method is alluded to in the breaking apart and coming together of the glitching elements in the video. Despite the breaks and distortions, a full sense of reconstructed space is achieved by the viewer, and a large volume of spatial information is conveyed in a relatively short amount of time. Projected in the exhibition as the largest video, the piece sets an important tone for the exhibition as whole, serving as a foundational layer. Although I have mentioned that the piece is relatively short, it is an hour long and most visitors will most likely not sit and watch the entire piece through—although visitors with deep connections to South Georgia may. But for those who do not watch the entire piece as they wander through the exhibit, the eye can return to it from other points in the room as they are looking at other pieces. This also helps accomplish the meshing of the different elements in the exhibitions into an overlapping whole, and mirrors the way we typically explore new environments, with eyes darting from different positions, incorporating glimpses and snatches of the visual world into an apparently seamless construction.



Illustration 13. Still from Photosynth Walk ii

A landscape of industrial ruin contains the past in ways that are not easily readable. These mysteries sit alongside and between obvious deductions of form and function in an archaeological sense. The whaling history at Grytviken has special significance in cultural heritage, being the centre of the last globalised industrial hunting of whales. Since then, whale hunting and processing does still occur, but the scale and exploitation of the globalised whale hunting, and its position providing ubiquitous industrial products from whales seems to be over. The unique expression of the historical factors in Grytviken and South Georgia are evident in the remains, but there is also a personal confrontation with a site of industrial ruins. There is a similar haunting feel to the remains of ghost towns from cycles of boom and bust that the age-old pattern of migration for opportunity and work entails. This other truth that we find evident in industrial remains is a bittersweet history that speaks of the trials of our ancestors in harder times, or perhaps the privilege or entitlement in families and organisations that employed migrants and temporary workers as a source of labour. In South Georgia there was a final season when the whalers left but then never returned. There was a financial truth that it was cheaper to abandon equipment and furnishings at South Georgia than to arrange for shipping of assets. The uselessness of

equipment that was custom built for the extraction of whaling products in a world that was moving on to cheaper alternatives such as vegetable oils and synthetic chemical replacements. The scarcity of whales from overhunting also played a role in the demise of the industry. What remained on South Georgia was at one time thought of only in terms of its scrap value minus transportation costs from the Antarctic. Tin roofs, old whale hunter ships, coil metal spring mattresses...what use was the detritus of 1960s and earlier whaling? Much of the abandoned content at Grytviken was cleaned up when concerns about health and safety of the site arose, asbestos was used in the stations extensively and this was beginning to spread to the nearby King Edward Point station which still had personnel who could be affected. Also as Grytviken deteriorated, rotting wood and rusting metal with ceiling leaks and occasional fires posed a danger for the visitors who occasionally came to see the old station. What we see when we look at the Grytviken represented in the Photosynth Walk series is a modified stationscape, it has been stripped of much of the old material that posed risks to developing the site to preserve and make accessible its history—much of this material also presented a danger to visitors and BAS residents.



Illustration 14. Still from Photosynth Walk iii

In order to preserve elements of the cultural heritage of the site the museum was created in 1991 by biologist Nigel Bonner and in 2003 Grytviken's unsafe structures were evaluated and torn down (Headland, 2009), where judged too unsafe or costly to repair. Asbestos was removed and buried to make the site safe for station dwellers and tourists, other debris was removed, including the extensive piping and conduits running through the station were removed for safety, and the stationscape we see today was established—some buildings were demolished in this process. Many buildings at Grytviken have been repurposed and preserved in this way, while retaining their histories. This adjacency of ruins and maintained buildings, side-by-side, is a strong characteristic of the site. *Photosynth Walk* captures this reality but does not possess an explicit narrative of the station life, a representative indicator of the ways the whalers occupied this site during their work. In considering novel ways of representing South Georgia Sense of Place I considered a more animated approach to these structures in the next exhibit account, but incorporating more narrative content around the historical station inhabitants and using different artistic methods.

# 3.4 Grytviken Stopmotion Photowalk 1



Illustration 15. Grytviken Stopmotion Photowalk 1 exhibition

Four minutes and two seconds running time.

Presenting an intact area of the station that was primarily concerned with the management and communal needs of the workingmen; this area retains a village feel that was closely bound to maritime traditions.

A conference paper on *Grytviken Stopmotion Photowalk 1* was presented at the London Electronic Visualisation and the Arts in 2015, subsequently published by Electronic Workshops in Computing (Smith, 2015). The following section contains excerpts from that publication although it has been updated and extended in parts for this different audience and due to research developments in the intervening time.

The area of the station that Grytviken Stopmotion Photowalk 1 visualizes was reduced from the whole to just a portion of the station, in this way a part would stand for the whole and relate the essence of the workingman's experience in an artefact that would be brief enough to casually view. The complexity of the entire station can prevent a more intimate connection. The photography was accomplished over two months as there was time to account for extreme weather changes and delays due to rain or snow. It was not possible to obtain all the footage in clear blue sky and sunny conditions, but the changing conditions also provide visual interest in this artefact and an indication of the passage of time without jarring the viewer. The feel of a narrative is accomplished in this piece, as well as relating that the concept of life on the station is influenced by maritime culture. The stopmotion photowalk format of animation and photography utilised here recreates an effect of the point of view of a walking movement. There is a time distortion effect where walking around a building would take much longer than viewing the photowalk of that motion, but without a corresponding feeling in the viewer that time had been sped up to the degree that it has been. Where a trip around a building might take as long as five minutes, the corresponding Photowalk could take forty seconds without much of a time distortion noted by the viewer. This makes it a practical choice to cover the extensive terrain at Grytviken. In this way a large section of Grytviken could be compressed into approximately four minutes and retain a feeling of a real-time experience.

Watching animation on a two-dimensional screen is not a spatially present activity for most people; they would not feel in most examples as though they would be present in the depicted world in a bodily way. However there is an interesting correspondence to some styles of stop motion animation—those that have relatively larger jumps or gaps between movements of the subject—and cognitive science research showing views of three-dimensional objects

that have been rotated. Shepard and Judd (1976) proposed that their '...subjects make the comparisons by carrying out a mental analogue of the actual physical rotation of one object into congruence with the other, and further, that the mental representations that are internally transformed in this way are more akin to the three-dimensional objects portrayed than to the two-dimensional retinal projections of those objects.'

Watching a film or animation has been traditionally viewed as a passive activity, and so immersion due to flow characteristics—involvement in an activity—would seem counterintuitive. However, the Andersons see the viewer as "...a meaning-seeking creature who engages the film as actively as he engages the real world about him" (Anderson and Anderson, 1993). This observation arises from a debunking of the myth of 'persistence of vision' in film and animation studies, an early theory that sought to explain viewer perception of motion when in fact they are seeing a series of still images in fast succession. The discredited theory goes that there was a piling-up of the images in the physical eye, where an image is retained (like an after image that we have all experienced) and merged with the succeeding image. The Andersons point out that there is no evidence of this phenomenon in science, but it persists in film criticism.

The perception of apparent motion is a complex phenomenon that is processed and integrated in different systems of the brain, according to different types of motion and signal interaction. One difference of interest in considering stop motion animation with relatively large gaps is summarised as '...closely spaced displays may be mediated by the same mechanisms as real motion, while more widely spaced displays involve a different type of processing' (Anderson and Anderson, 1993). These are respectively termed 'short-range' and 'long-range' apparent motion.

Although there is not an argument here to suggest that a stopmotion photowalk style animation effect is either definitively short-range or long-range, it is possible that the process of flow might be invoked in processing of long-range apparent motion. If long-range apparent motion is not processed as real motion (in the way short-range appears to be) then it is possible that there is a more task-related type of activity, an engagement, taking place in the brain

that contributes to a flow based immersive quality when viewing a stopmotion photowalk.

Music to accompany the animation was selected as the traditional British seafaring song, 'The Sailor's Hornpipe' (D'Almaine, 1913). This reflects the presence of the British at KEP around the harbor who interacted regularly with the Grytviken residents and acknowledges the political hegemony of the British—in licensing the station as the regulatory authority in the region. Captain Cooke, who made landing and claimed SG for Great Britain, was known to promote the song and dance on his ships for the sailors' exercise (National Maritime Museum, 2015). It is possible that this was the first music performed and heard in SG waters. Basberg (2002) points out the maritime background of the shore whaling stations, 'In many respects a whaling shore station became "a ship ashore" especially in terms of how the accommodation was organised.' This influence points to the naming of the 'Slop Chest' for the building in Grytviken where workers could buy tobacco, clothing, chocolate and other treats. Adjacent to the Slop Chest in the same area of the station was where the coffee beans were roasted and ground, as well as the bakery where their bread was kneaded, risen and baked. And the larder buildings where food was stored for the workers.

This stopmotion photowalk effort attempts to add to the existing richness of media content for the remote location as well as explore possibly unique contributions from an animation perspective. A choice to use video footage replicating the walked paths would be different in experience for the viewer, perhaps effecting a more short-range apparent motion perception, than what seems to be the long-range apparent motion of skipped views in the stopmotion photowalk. Transitions between various walks have been made by zooming into and utilising the high-resolution raw format of the photography, which would not have been possible in video recordings at standard resolution. Real time video walks would take longer in duration than the stopmotion photowalk, and if sped up would lend a different quality to the footage than the selected views of the photography based stopmotion photowalk. This area matches the one depicted in the Olfactory Installations later discussed in Chapter 5.2. The information about the buildings is minimally provided in the

intertitles of the Stopmotion Photowalk sequence, in order to repeat or overlap the same content in different modalities.

Earlier reviewed in Chapter 1.3.3, Cross seems to have coined the term 'stopmotion photowalk' to describe a process of taking numerous photographs in such a way that they later can be assembled as sequences in a manner like both stop motion photography and time-lapse photography (Cross, 2012). The term seems appropriate in that it communicates in the first compound word that there are selections or manipulations of motion at intervals and in the second word that these are achieved by photography of a subject and the photographer's movement. The form of the 'walk' is thus revealed by the viewer's immersion in the point of view of the camera. The spatial characteristics are communicated in the animation, not at a glance as in a map, but through a temporal ordering and presentation of static views that provoke a perception of long-range apparent motion.

The stopmotion photowalk format animation produced from this research joins other forms of virtual media created concerning South Georgia. It provides for a form of virtual tourism that approximates a walk around a section of the station, without the need for travel or expense. It also preserves cultural heritage documentation in the form of photographic evidence of the site as it existed at the time of photography.

There is some basis to suggest that the apparent motion perceived by viewers of the stopmotion photowalk technique, are utilising the process of long-range apparent motion perception, a form of perception that differs in processing quality from real and short-range apparent motion perception. This different type of perception processing may lead in turn to a perception of flow being perceived at some level that is more of a feeling of active involvement or participation with the sequential images, hence to a heightened sense of immersion.

There may also be a level of immersion achieved in the stopmotion photowalk technique by the formation of internal mental representations of rotating forms where views are anticipated slightly according to an internalised model, filling in missing gaps of the rotated image views.

Sense of place of Grytviken, South Georgia will vary widely according to a viewer's previous exposure, attitudes and personal beliefs. The perception, reinforcement, reflection on, rejection, or alteration of personal spatialisations (or senses of place) of a viewer when exposed to representations of time and place are of interest in considering the production and consumption of media content for a remote location of cultural heritage.

These ideas of information and rotating views of sites is explored in the next section in a related artefact, where rather than various walks and views connected in video editing—the rotational views are presented in looping stand-alone sequences in adjacent context to other site animations.

### 3.5 Stopmotion Walks, Grytviken



Illustration 16. Stopmotion Walks, Grytviken still, by the author

Seven minutes and thirty-four seconds running time.

In this video projection, the stopmotion photowalks are presented in proximity to each other, as each building or site advances—it is presented in colour and with a title designation. The adjacent sequences are in black and white and present a spatial context surrounding the focus

Stopmotion Walks Grytviken shows another way of visualising the various walks. This approach emphasises how they can be put together into an experience that conveys the idea of a record or archive. The piece exhibits limited information about the historical use of the building or remains, presents memory prompts for those who have visited, and provides orientating spatial information for people who have not been to Grytviken. The video takes the single screen and separates it into multiple screens, providing adjacent context of the building. This work is a step toward previsualising an interface of sorts to the visual documentation of the station. One site at a time (centre bottom of screen) is portrayed in colour with a subtitle of the historical name or context of the building or remains. All six views rotate in loops in sequence, but the untitled five peripheral views are presented in black and white. Sites advance through the six locations, each taking a turn to be the focus and titled with its designation, and serving in turn as spatial context for the other pictures. Six positions remain constant in the video, but all the sites documented at Grytviken cycle through these spots, entering from the right of the screen and exiting to the left.

There is an overwhelming effect with so much motion going on in the screen. Even for someone who is intimate with the various areas of the station, it is difficult to keep track of what is going on in six various views that are always changing and also in motion across the screen. This viewing difficulty parallels the challenging nature of maintaining sites like Grytviken, multitasking and staying on top of or in control of change in any situation is largely one where we restrict our view of the phenomenon to one that is manageable and comfortable. This illusion of limiting the world to our focus is a practical solution to sensory overload; however, being open to a large complex picture is also important to choose, prioritise, and note subjects within the larger picture. The viewer can consciously choose to defocus the gaze in Stopmotion Walks, Grytviken, trusting that the eye can take in a sort of global information presented, without darting the eyes around to capture details. Sticking with this overview vision is like noticing something in peripheral vision. The suggestion is to aim the eyes toward the centre of the visual field, roughly where the text is so that it is readable and then keep the eyes de-focused as long as possible. This gaze is challenging to maintain, but if achieved for a

period—the viewer becomes aware that the progression of the sites through the sequence is easier to perceive rather than more difficult. The viewer can notice that the attention can shift to track items or notice them within the wide visual field, independently of changing the actual eyes' viewpoint to focus on an area of attention. This is similar to mindfulness training where the intention is held steady within a field of awareness.

The video is useful in showing another form of the walks that photography was collected from and its screening in the installation provides further context to the question of visualizing the walks. This final walk contains a visual mindfulness tutorial or training challenge, to become aware of the mind's focusing attention independent of how we normally think of our visual focus and mental attention being the same thing.

Chapter Four: Material forms of narrative and memory



Illustration 17. Harpon Hut, SG, photo by Anthony Smith

Taking advantage of the opportunity to hike to a cabin on Harpon Beach for a brief stay, the author reads through a journal or bothy book that is stored in the hut. The journal contains text entries from past visitors to the hut—mainly BAS staff. These date back to the 1970s and represent a unique material form of narrative and memory of the site.

#### 4.1 Introduction

During my time on South Georgia, I pursued the opportunity to explore whaling station remains that are not as accessible as Grytviken for both remoteness and for health and safety reasons. The stations other than Grytviken require restricted entry permits and these were approved to visit Leith and Husvik stations (walking alongside but not entering Stromness station). Reaching Leith involved a boating expedition from King Edward Bay—accomplished by BAS—and accompanied by a SGSSI government officer, as part of the terms of the permit. Travel required not only the boat that we journeyed in, but also an escort boat, as per safety regulations, in case there was any issue or problem with a single boat. Our boat first pulled up on the beach at Husvik, here we quickly brought our gear ashore. The beach was heavily populated by fur seals, we moved quickly so as not to disturb them for any longer than was necessary. We dropped our supplies in the Manager's Villa which is a habitable building at the site, periodically occupied by BAS or government officers. The villa is outside of the controlled entry area of the station (due to asbestos removal in the villa).

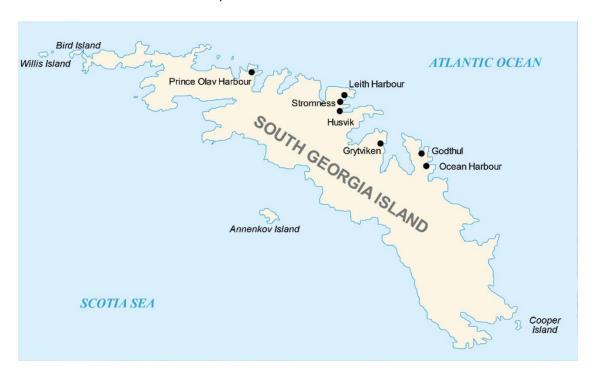


Illustration 18. South Georgia whaling stations, L. Ivanov, CC BY-SA 3.0

After dropping our supplies, we then re-joined the boating crew and journeyed along the coast to be dropped off at Leith Harbour station. Our plan was to explore Leith on foot, then hike south to Husvik, walking alongside Stromness

station on the way. We would then be picked up after a few nights stay from Husvik, this gave us the most time at Husvik—especially given the eventual delay in our being picked up due to adverse weather conditions. After the boats journeyed from Husvik and landing at Leith, we were welcomed by droves of fur seal puppies, the beach was covered in them, at this age they were still quite small but large enough to range independently from the mothers. They gather in groups and then individually locate or are located by their mothers for feeding. Fur seal numbers in Grytviken have steadily increased despite the human habitation there and around the cove at King Edward Point—but in Leith the number of fur seals and other wildlife was staggering in comparison. We made it past the beach and up to higher land on the outskirts of the station and here we put on our protective gear, white body suits, filter breathing masks, and helmets, presenting a surreal vision of alien intruders to the fur seals. At this point we received word from the boat through radio that we had forgotten to take a fur seal bite kit with us. This kit is required on trips away from Grytviken and King Edward Point, due to the nastiness of a potential fur seal bite in the field, far from medical assistance.



Illustration 19. Expedition team aboard the Pipit

The fur seal bite is particularly prone to infection due to the mix of toxic bacteria that fur seals carry in their mouths and coexist with, which humans rarely encounter (Kouliev and Cui, 2015). Prior to the trip I attended a training

session with the BAS medical doctor at Grytviken and took this quite seriously, given the fact that we would often be 'out of comms' (communication) during the trip and that launching a boat from BAS must meet wind speed and weather criteria, as well as landing at beaches. There is always a likely chance in South Georgia that it is not possible to travel, and this factor must be taken account of in all operational planning. The fur seal bite kit therefore contained potentially lifesaving remedies. After finishing the radio call with the boat, we went back down to the beach through the thicket of fur seals and retrieved the bite kit from the returned boat—saying our jolly goodbyes to the boat crew once more.

Walking through Leith Harbour station, differences from Grytviken in the way the sites were abandoned are clear. Leith has been left alone much more, although there was some intervention in the ruination of the site in the events leading up to the Falklands Island War, a conflict that ultimately began in Leith Harbour. Items intended for scrap salvage just prior to the outbreak of the war, have been organized at water's edge and here and there items meant for salvage throughout the station have been left exposed, moved out of the buildings originally housing them. These scrap collections were never picked up due to the outbreak of the war. There has been no asbestos clean-up here at Leith, and unsafe structures have continued to deteriorate. These remains seem to leave the local wildlife relatively unfazed. Mesothelioma, a cancer linked to asbestos exposure, takes around forty years after exposure to diagnose in humans (Robinson, 2012), this period exceeds the lifespans of animals exposed at the site. For example, the fur seal typical life span in the wild is from twelve to thirty years, therefore there seems to be little risk to wildlife for exposure and the government balances the considerable expense of clean-up operations with the risks to both wildlife and people. The elephant seals likewise seem little affected by the station remains, they get into sheltered spots where they can and then form wallow areas to nap in groups. An exception to the animals coexisting with the ruins was discovered coming across the remains of a reindeer in the Guano Store; it was quite a macabre sight to happen upon looking into the high-ceilinged building. At first it appeared to me as a horror—as if the remains had been purposefully strung up—there was a rope descending from the high ceiling that held aloft the horns and skull, keeping the body below fairly upright, albeit in a somewhat seated position. After my first impression, we could see that the animal had gotten into the store at some point and entangled its antlers in the rope hanging from the ceiling. The poor animal was unable to free itself and must have died horribly from thirst.



Illustration 20. Reindeer remains in the Leith guano store

Outside Leith as we were preparing to begin the trek to Husvik via Stromness, I was passing a male fur seal, giving him room and circling around his territorial perimeter, when I stepped into what I assumed was a shallow puddle of water—to my surprise I immediately was plunged into thick liquid at around a chest level. I learned later that elephant seals come ashore and over time can create deep wallows; these depressions are filled with general mud, muck, excrement, and liquid that the elephant seals find quite comfortable and warm to float and rest in. Luckily, my foot—which in an instinctive scramble to escape the wallow had partially come out of my wellie—was able to slowly and carefully hook back in and thus I did not lose my footwear for the upcoming hike. We had not brought any spare footwear in our rucksacks and hand many miles to go. I was helped up and out of the wallow by my colleagues and could clean up fairly well at a nearby water source. Dressed in waterproofs, nothing had penetrated the layers, even with the wellington boot coming

partially off, the long mouth section with a waterproof trouser covering the outside, had prevented any liquid seeping in.

After a momentary pause we then continued our land journey. For a great portion of the hike we were following the edge of the harbour, but the level beach itself was almost completely impassable. Forming a narrow strip between high ground and the sea, it was crowded with fur seal groups at this time of year, and we therefore skirted the beach along the hillsides that rose above the beach. This was sometimes hard going, but at least we were not impeded by hostile fur seals. Much of the way we could use tracks established by the reindeer to assist us in passage. These were very vague lines formed by the reindeer travelling in single file over many years, but once clued into their presence, I began to spot them more easily. Strangely the slight tracks made a significant difference in the effort of hiking, they were only a relatively subtle accommodation of rocks shifted into a marginal and narrow path—often only about the width of a single foot. At the time of our passage the reindeer had been eliminated from this section of the island, an area bounded by glaciers impassable to the animals. This was done as part of the Habitat Restoration project (HR project) to rid the island of invasive species that were introduced and damaging the native flora and fauna. Reindeer were not as despised as the rats—which were the focus of the HR project—but were an important species to eliminate. Firstly, as they would eat the poison bait intended for the rodents and second, as they greatly affected the vegetation on the island in areas that they grazed. The native tussock grass forms habitat for many sea birds and this was being drastically reduced in reindeer areas by overgrazing.

As we passed alongside Stromness, we could see that the station was similar in some ways to Leith. It was also abandoned in a state of ongoing ruination, deteriorating in the elements. We could not take a close look at Stromness due to time constraints; we needed to press on to reach Husvik before nightfall. We could see from a distance the Managers Villa, and various buildings and sites, some related to the explorer Ernest Shackleton's stay, when his crew of men found refuge from their plight at this station in 1917, having crossed the island from the landing of their small lifeboat the James Caird on the glacier filled southern shore of the island. After hiking the width of the island to the

station on the northern shore, the intrepid survivors could send rescue to their shipmates still stranded on Elephant Island courtesy of the whale catcher *Southern Sky* (Headland, 1992, p. 75). Continuing, we stuck out more overland, leaving the coast behind us to reach Husvik. This was a relief from the need to skirt the hillside, although there was still some high ground to cover.



Illustration 21. Hillside above beach, SG. Photo by Dr. Bjørn Basberg.

We happened across an area that had been fenced off; this was a test site set up to see how quickly vegetation would recover with the reindeer excluded. The growth inside the corral was noticeably more lush and native. The enclosed area had a head start on the surrounding terrain, which we were seeing not long after the reindeer were exterminated from the area. My memory of this small enclave of recovering native flora is—I imagine—now more what the surrounding larger region we journeyed through, would appear at the time of writing, as the native flora recovers from overgrazing. Later as we descended from some high ground, beginning to approach the outskirts of Husvik station in the distance, we happened on some high tussock grass that was occupied here and there by fur seals. This was quite a challenging leg of the journey, the seals were invisible in the high grass until flushed out by our presence, we were fortunate to not actually step down on some as they were

quite thick in the grass. I typically was at the rear of our party, following in the others' footsteps, having the smallest stride of the three of us and being the least experienced with hillwalking and South Georgia terrain. Often this would mean that a surprised fur seal would just be beginning to collect his wits and grow offended by us passing though his territory when I caught up to him. This involved a little extra time in some cases, so that I could use my bodger and skirt around him—taking care not to tread on any adjacent fur seals in the area. A bodger is a long thin pole, normally those on the island use a commercial walking stick. Fur seals perceive the end of this stick as an extension of the person, therefore it is not used as a weapon, but to make you seem larger to the seal, and thus not vulnerable to their attack. Keeping an arm's length distance between us, I would are around the seal, until withdrawing. It is important not to leave too quickly from a confrontation like this, as the fur seal could interpret it as running which can cause them to give chase. It was a real physical and psychological relief to make it to flat open terrain at the bottom of these slopes.

In between this area and the station was the dry dock or hulk of the Karrakatta, this ship had been pulled ashore to use her boiler system to provide steam to a station outpost engineering shop, the pipes are still run out to the ship, connecting it to the nearby shop. Leaving the Karrakatta it was just a short walk to finally arrive at Husvik, the end of a very long day. The gear we had dropped early that morning—seeming like several days ago in relative time was there waiting on us. We had some tasks still to perform; although the Manager's Villa is habitable, we needed to collect drinking water from a glacial stream far enough away not to be contaminated by seals. The house even had a toilet, a real luxury although this was flushed by emptying a bucket of stream water down in the bowl, and ran to the sea in typical South Georgia fashion. A look at the generator attached to the house was disappointing as we could not get it running, this meant lantern light and no heating. We had red noses and cheeks from the cold inside the accommodation, but the hot dinner cooked from rations on the gas stove was a real feast, and we had beds to lie on as we slept in our sleeping bags after washing with water warmed on the propane stovetop.



Illustration 22. View from the kitchen window of the Managers Villa at Husvik

That night in the villa was quite special, it was surrounded by remote wilderness, easily the farthest I have ever slept away from what could be called human settlement, but surreal as it was within the context of a quite modern-feeling house. Lying on the bed and looking out the bedroom windows at night onto a beautiful but eerie landscape, gave the feeling of domestic normality set in a quite alien world. The calls of elephant seals, fur seals, and various birds surrounded the villa, and glacial melt streams flowed all around it, meeting in front of the house in a network of mini streams that connected to the sea. We ultimately spent much more time at Husvik than planned due to weather conditions being unsuitable for us to be picked up safely.

#### 4.2 Leith Slideshow



Illustration 22. Still from Leith Slideshow i, photo by the author

### Eight minutes running time.

This series of projected still images from Leith Station provides a contrast to Grytviken's more sanitised feel. This station differs from Grytviken in that it has not been 'cleaned up' and is less frequently visited due to danger from exposed asbestos and deteriorating structures. This station provides a setting for the Scottish whalers' historical presence in South Georgia

The play *A Cinema in South Georgia* is primarily concerned with Leith Harbour station, due to it being the station that employed the most men of Scottish heritage on South Georgia, therefore I planned *Leith Slideshow* to reflect the setting of the play described in Chapter 4.2. For the exhibition, a projection of *Leith Slideshow* was displayed in the same physical location occupied by the play's use of historical footage of the whaling station. Most of the exhibition concerned Grytviken for the reasons already discussed but the play's setting at Leith allowed me to feature some of my journey to the three other stations on South Georgia for context.

This trip through the three stations other than Grytviken, helped to inform much of my understanding of the remains of Grytviken—which the exhibition centres on—as well as providing a wider context of the sense of place for the stations on South Georgia. In Leith Station, as well as at Stromness and Husvik, there were different versions of equipment and buildings used for the same purposes as in Grytviken. These stations provide a fuller sense of the ruins of whaling on South Georgia as the crumbling buildings and debris are largely left as they were when abandoned. Rusting, rotting, fraying, or otherwise changing from when they were abandoned with relatively little human intervention in the intervening decades. The feeling of the abrupt abandonment of the station also came through much more strongly, there were mattress still in rooms, items left on counters, film canisters with the bleached filmstrips spilling out on the ground. It was wilder than Grytviken, with much more animals in evidence. It was also more human in a way—with more of the evidence and physical remains of the whaling station as it was left when the personnel took ship home.

For Leith Slideshow I selected sixty photographs of Leith station to be projected in the exhibition on a wall of the gallery that would later serve as the backdrop for the performance of the theatrical production. The content provides a contrast to the cleaned-up nature of Grytviken for the sites at Leith, and the other stations on South Georgia, which have been mostly left to natural processes of ruination on the island. This work points at a dilemma for policy makers for South Georgia in terms of how to approach these sites and their issues of access, asbestos, safety, and cultural heritage preservation.

# 4.3 A Cinema in South Georgia



Illustration 23. A Cinema in South Georgia, photo by Kieran Baxter

This theatrical production is based on first-hand accounts of life on South Georgia Island in the whaling days. The concept and research were undertaken by Susan Wilson from Eyemouth, whose father was a whaler on the Southern Briar. It tells the story of four men whose lives, through various circumstances, have come together at Christmas, 1959. The play was invited into the gallery and performed as part of the exhibition.

I learned of the play A Cinema in South Georgia after my SG expedition and as I was preparing work for exhibition. I attended the play and met the authors and players at a 2015 Edinburgh Fringe Festival performance (Edinburgh Fringe Festival, 2015). The co-author Susan Wilson is the daughter of a former employee of the Leith Harbour whaling station in South Georgia. After he passed away in the year 2000, Susan talked to other former employees of the whaling industry in South Georgia and wrote the play in collaboration with Jeffrey Mayhew. I negotiated the gallery space performance of the play within the exhibition to provide attendees with exposure to the intangible heritage of South Georgia. The living link to Susan as the Scottish child of a South Georgia whaler provided narrative content that furnishes another aspect of the sense of place visualization, both presented to and fostered in the audience. The performance was scheduled to take place at the exhibition during the reception night, so that attendees would have time to experience the exhibition and then see the performance. Once the attendees were 'placed' in the South Georgia visualization of the remains of the whaling stations, the narrative content of the play set in the 1950's provided a living interpretation of the culture of the stations during the last days of the whaling in South Georgia.

Within the narrative of the play, Susan interweaved historical details, perspectives, and conditions of the whalers as learned through her interviews with ex-whalers, research, and her personal family experience. I purposefully limited the informational text within my exhibition—the content that might normally be delivered as part of a museum display or informational exhibit. Instead the viewers are expected to confront the tangible heritage representations in the form of the buildings and ruins, more directly, as though happening upon the site. The performance of the play provides a contrast to this approach, communicating to the audience through the conventions of theatre. The intention was that the two modes would complement each other by performing functions in different ways for the attendees. The exhibition did not serve so much as a background to the play as a contrast in content and technique, each element doing work that the other form might struggle to achieve. While the exhibition aspired to establish a reflective mood where the viewer could shift focus to not only representations of the whaling station, but

the way they perceive through their senses and make connections with their cognitive processes.



Illustration 24. The author, Susan Wilson, and the players of A Cinema in South Georgia at the 2015 Edinburgh Fringe performance

The play presented a lively performance with characterisation and theatrical storytelling techniques, a narrative framework through which to impart place-meaning. The goal of this pairing was that by the end of the evening the attendees would have formed a rich sense of place appreciation for South Georgia, a fusion of tangible and intangible heritage that also incorporates space for reflection. The sum of these activities would then provide visitors with the content and experiences to be able to form their own visualizations of a South Georgia sense of place.

The play performance required equipment to be placed in the gallery. A large array of professional lights, wires, props appropriate to theatre, sound control equipment, a desk for the controller, and seating for the guests. The exhibition leading up to the performance aimed to establish a meditative atmosphere for the installation and this was altered by the accommodation of the play. Chairs were only brought out during the exhibition close to the performance time of the play. In advertisements, guests were invited to arrive early before the

starting time of the play, to see the exhibition freely without the obstruction caused by the seating. Some props were also kept in the small storage area of the Centrespace gallery until required to minimise clutter. The equipment that was left out in the space added some interest and gave an element of excitement to the exhibition, especially if the viewer had attended the exhibition prior in the week and then returned for the reception.

The theatre company was welcomed into the space when setting up, placement of items was negotiated to present the exhibition as authentically as possible whilst accommodating the needs of the play performance. Generally, this was very smooth, and everything fitted into place. The time that it took for the exhibition reception and the play performance meant that guests were not able to remain for a planned question and answer session with former whalers who had attended the reception and play performance. There are differences between a theatrical performance and gallery exhibition, part of the interest that I had in forming this partnership was the juxtaposition of the two modes to the attendees and an interest in seeing how people processed the rarefied atmosphere of the gallery and the more intimate feel of a small play. The audience itself was more composed of gallery attenders, artists, academics, and those interested in art exhibition, with some South Georgia focused attendees. For the 2018 exhibition the theatrical performance of the 2016 performance is presented in A Cinema in South Georgia Video Documentation, rather than restaging the play. The exhibit is accomplished with chairs, video monitors, and headphones so that the 2018 visitors can query the audio-visual performance record in a way more like *Texts*. In the gallery space the visitors can watch as little or as much of the performance record as they desire. It becomes in this way not just a documentation of the play, but also the performance at the 2016 exhibition, allowing us to see not only the tangible heritage of South Georgia in the form of most of the exhibits, but also a record of the enactment of intangible heritage communication that the 2016 performance entailed.

## 4.4 Texts



Illustration 25. Former whaler at Texts

This installation consists of the book The Shore Whaling
Stations of South Georgia by Bjørn Basberg and a pamphlet,
an original self-guided Grytviken walk informational publication
created for the South Georgia Museum by Nigel Bonner
(Appendix).

In planning for one way the exhibition could serve as a reflective space, an area was set aside for *Texts* under the display showing *Photogrammetry* Walks, Grytviken with a table and a chair. On the table under a reading lamp, were left two texts for visitors to peruse if they were inclined to do so. Texts relates to the idea that South Georgia whaling station information or knowledge is readily available to an interested individual. The internet provides access to articles, books have been published, and various organisation sites exist—such as the SGHT and GSGSSI—with information. The *Texts* installation points at this facility for us to acquire information easily in our networked age. The chosen texts provide a perhaps nostalgic view of information to connect with the way people tend to associate connection with textual knowledge, via printed materials. These items are a large hard cover book that guests can leaf through (Basberg, 2004), and a vintage pamphlet produced by the Museum on South Georgia describing a self-guided walk through the station ruins (Bonner, 1993) included in the Appendix. The first text was chosen as the authority on the industrial history of whaling stations on South Georgia Island. The pamphlet was discovered at the South Georgia Museum, as a stockpile of the pamphlet was being thrown out, and was authored by the founding Director of the South Georgia Museum. These pamphlets are now obsolete as they date to a time before the environmental and safety clean-up of Grytviken, to a time when visitors were encouraged to explore the ruins on their own, climb up on things to have a look, and admonished to be careful to mind their own safety.

As a part of the installation, *Texts* works to contribute to the exhibition on different levels. It helps to establish a reflective atmosphere, one conducive to learning more about the stations in a manner that is intimate and personal. The *Texts* exhibit also provides a direct sensory modality that is not focused on in the rest of the exhibition. It allows the viewer to participate in the exhibition by touch, holding and manipulating the book and pamphlet when reading, browsing through, and interacting with these material objects. The book is hardbound and of a significant weight, the pamphlet is in contrast a folio, being two folded-together sheets of double-sided A4. Visually the book and pamphlet are set off by a reading lamp, intended to create a welcoming spot to engage with the written content. Not all visitors choose to physically interact

with the texts of course, for these people I feel *Texts* works as a reflection of their lack of interest in formal or written information on the stations. They may be interested enough to come to the gallery for art related, or social reasons, or perhaps they found the background knowledge in the exhibition to be sufficient. This background knowledge, for example, in the brief subtitles of *Stopmotion Walks* or in the somewhat longer intertitles in *Grytviken Stopmotion Photowalk 1*, has been purposefully kept minimal to depart from the conventional cultural heritage display visualizations that can be found on websites as films and graphics, or in museum exhibitions as well as within the exhibition itself from *Texts* or the theatrical performance covered in the next section, *A Cinema in South Georgia*.

Texts, although composed of traditional printed materials, is directed at revealing the way a contemporary audience can pick and choose to access information that it is available on demand. Most visitors to the exhibition can access extensive information on South Georgia from within the exhibition on their personal mobile devices. How we determine what information and knowledge we seek out in our very limited time and the contrast to the relatively unlimited amount of information available is intriguing. Is one function of cultural heritage visualization to pique an interest? Perhaps viewers can be inspired to seek out easily accessible information from connecting in a way that they feel some personal resonance or are struck by the mystery of a place and its cultural heritage. Sense of place visualization is important in this regard, as we connect with our senses, emotions, and thoughts and really 'feel' a place, this can become a motivating factor to learn more about tangible and intangible cultural heritage for a given site.

Many who attended the exhibition, were of course already interested in South Georgia and attended specifically as it concerned an area of the world that they were perhaps intimately familiar with. I was able to chat with one man who had come into the gallery as it was open during a weekday. He entered the gallery and as my studio area at the time was adjacent to the Centrespace gallery, I noticed and dropped in to say hello. In conversation I learned that he had worked a season in South Georgia as support staff for the whaling industry. Approximately an hour or so later as I was leaving for lunch; I peeked in the gallery and found him seated at *Texts*, leafing through Basberg's book in

the setting of the exhibition. He gave me permission to take the photograph on my phone of the moment, and for me it recaptures some of the feeling of being able to have created a space for him to reflect in and feel acknowledged as a former whaler of South Georgia, which seemed to connect with him personally. He later attended the closing reception of the exhibition and performance and told me 'you have done a good thing here.' The men who worked on SG in the whaling days can be harshly judged in today's moral climate for employment taken up in their youth that would be looked down on today. But it is important to remember the context of the times and consider instead perhaps, industries of today that may one day be judged as unethical or unsustainable.

Chapter Five: Embodied sensing and metacognitive visualization



Illustration 26. A visitor within Flensing Plan Mandala

We make environments as environments make us, the use of technology or artifice as elements in creating places nevertheless requires embodied sensing on the part of the individual. The cognitive remove achieved in considering how sense of place is formed within the mind helps us to better understand place in general and South Georgia in specific.

#### 5.1 Introduction

Chapters Three and Four are introduced with an account of experiences in South Georgia, travel and destination reflections that serve to contextualize the practical work relevant to those chapters in exploring representation of walking and visualization and in considering material forms of narrative and memory. This chapter deals with the internal exploration of ways of considering experience, sensation, and cognition within the mind in terms of first-person based enquiry into consciousness that have assisted development of the final two exhibits. Intentionality and the concept of subconscious projection into consciousness, provide mechanisms through which to consider sense of place formation and how methods from art practice can perform these functions for the viewer. Parallels between historic practices of meditation and mindfulness are noted with modern cognitive science and with concepts in phenomenology.

Davis and Thompson (2013 p. 585) explain parallels of purpose in Western cognitive science's pursuit of understanding of the nature of consciousness and in the historical practices of Buddhism. They point out that Buddhism 'originated and developed in an Indian cultural context that featured many firstperson practices for producing and exploring states of consciousness through the systematic training of attention.' In modern cognitive science the primary methods of investigating mind are largely third-person observation and analysis of the physical brain and of behaviour. Davis and Thompson (2013 p. 586) observe that these two different approaches to understanding the mind can benefit each other as '...understanding the conceptual frameworks of the Buddhist teachings can help scientist to refine the theoretical frameworks they bring to research on meditation and consciousness.' The literature in Buddhism is extensive and dates back thousands of years—with a focus here on those applications of practical methods in training the mind through meditation— it possesses many schools of thought, or lineages. In the Theravada tradition the collection of writings known as the Abhidhamma is widely considered to represent an authority in Buddhist analysis of mind and consciousness. Heim (2013 p. 378) identifies that 'The basic Abhidhamma analysis of human experience proceeds through breaking it down into its smallest components, regrouping them into various functional classifications and exploring their interactions.' In their practical guide for meditation Yates et al. (2015) simplify the complex system contained in the Abhidhamma to articulate the '...Moments of Consciousness model drawn from the Theravada Buddhist Abhidhamma, [which] includes some elaborations and expansions by a later Buddhist school known as the Yogacara, explored using modern terminology and a more science-based framework' (Yates et al., 2015 p. 147).

Yates et al. use the analogy of perceived motion in cinema film—made up of many still images that give an illusion of smooth movement—to explain how we perceive our day to day experience of the world. In the moments of consciousness model that they advance, our thoughts and sensory experiences only seem to smoothly flow one into the other. they assert that if we observe closely, we will find that all experience is actually separated into individual moments of consciousness that occur one at a time in quick succession, and in very large quantities—so that they appear to us to create one continuous and smooth stream of consciousness (Yates et al., 2015 p. 147). In this model, consciousness is assumed to be only capable of discerning information from one sense organ at a time, all moments of sensation are distinct from all other moments and Yates et al. (2015 p. 148) describe that:

...each is a separate mental event with its own unique content.

Moments of visual experience can be interspersed with
moments of auditory, tactile, mental, and other sensory
experience, but no two can happen at the same time... It is
only because these different moments replace each other so
quickly that seeing, hearing, thinking, and so forth all seem to
happen at the same time.

The understanding of consciousness as being consistent with the moments of consciousness model has been historically investigated largely through the first-person practice of meditators in various traditions, who investigate their own conscious experience of the mind's operation through disciplined practices. Varela et al. (1993 p. 33) point out that 'it is necessary to have a disciplined perspective on human experience that can enlarge the domain of cognitive science to include direct experience. We suggest such a perspective already exists in the form of mindfulness/awareness meditation.' Their seminal work in cognitive science—expanding the possibility of including direct experience of meditators as part of the research field—has led to an increase

in studies on meditation/awareness practices over the last few decades. However, Davis and Thompson ( 2013 p. 586) take issue with

The...scientific literature on 'mindfulness' meditation... [as describing a]... form of meditation [that] can be broadly categorized by the aim to cultivate a lucid awareness of one's own moment to moment bodily, emotional, perceptual, and cognitive processes...yet attempts in the scientific literature to formulate what mindfulness is have often proceeded in almost total independence from theoretical formulations of mindfulness practice contained in Buddhist textual traditions.

Varela et al. (1993 p. 22) considered this contemporary understanding of 'mindfulness' as being 'present in embodied everyday experience' to be of use in being able to 'lead the mind back from its theories and preoccupations, back from the abstract attitude, to the situation of one's experience itself.'

Davis and Thompson (2013 p. 586) note that references in the scientific literature to 'mindfulness' often cite the term as a translation of the Pali language term sati. They point out that 'In Buddhist theory, however the term sati carries connotations of memory and remembrance, making attempts to understand mindfulness as a present-centred, non-elaborative, and nonjudgemental attention appear inaccurate and confused.' Gethin distinguishes (2011 p. 273) that '...it is clear that what is problematic in the context of [the translation of sati as mindfulness are our habitual judgments and opinions about how we and others are; being non-judgmental is about making space for a different perspective on how things are.' He maintains that the ancient—and some contemporary—understandings of mindfulness in Buddhist traditions, facilitate this aspect of perceptual shifting by a systematic use of recollection of the purposes of the practice. As he (Gethin, 2011 p. 275) puts it 'The traditional Buddhist account of mindfulness plays on aspects of remembering, recalling, reminding and presence of mind that can seem underplayed or even lost in the context of [modern usage].' Davis and Thompson (2013 p. 586) simplify the general use of sati as 'perhaps best captured by the colloquial notion of 'minding'... sati clearly can involve elaborative and evaluative cognitive processes.'

Varela et al. (1993 p. 29) observe in agreement with elements of Gethin's earlier sentiment, that:

...the practices involved in the development of mindfulness/awareness are virtually never described as the training for meditative virtuosity (and certainly not as the development of a higher, more evolved spirituality) but rather as the letting go of habits of mindlessness, as an unlearning rather than a learning. This unlearning may take training and effort, but it is a different sense of effort from the acquiring of something new.

Varela et al. make a link (1993 p. 25) between this concept of the mindlessness of everyday life and the opinions of Heidegger and Merleau-Ponty, in that the '...abstract attitude [they] ascribe to science and philosophy is actually the attitude of everyday life when one is not mindful. This abstract attitude is the spacesuit, the padding of habits and preconceptions, the armour with which one habitually distances oneself from one's experience.'

Heim (2013 p. 379) argues that 'Conscious experience is always intentional in the phenomenological sense of intentionality, mental phenomena are characterized by an essential or immanent relation to their objects.' As consciousness is fundamentally concerned with an object—and hence intentional—Heim is interested in sensory contact or stimulation as this is the way in which consciousness arises and assists us with understanding. Here, [stimulation] 'refers to the contact of conscious experience with the objects of the six senses-that is, the five sensory organs and the mind sense' (Heim, 2013 p. 379). Heim (2013 p. 383) elaborates that the 'overlap of...[a] Buddhist notion of intention and the modern phenomenological sense of intentionality should not go unnoticed...' Here she argues that intention is manufactured—or arises—by its own operation in conjunction with the other associated factors of mind.

Heim (2013 p. 384) asserts an active role for the mind in creating and constructing the objects of experience, clarifying a contemporary misunderstanding of the word karma:

When we assemble...interrelated aspects of intention-its arranging and rallying of other mental factors in the construction of the objects of sensory and mental awareness, its identification with karma and karma's logic of accumulating conditions, and its link with...constructing and constructed activity...we locate intention's centrality to a range of ethical and soteriological [salvation based] doctrines. When modern scholars have tried to interpret intention's role in karma by pairing with English words for will, choice, rational decisionmaking, and so on, they have missed [the] basic...Abhidhamma sense of the creative activity of the mental construction of experience. The subjective or internal aspect of karma is not moral choice, but a much more elementary putting together of the mental factors that shape our present and future experience. This is not to deny agency but rather to define it as the very basic process by which the mind puts together its processes to construct the world of experience; this activity is, at bottom, what karmic action is all about.

The relevance of exploring the term of karma in its historical usage is worth noting in relation to the hermeneutical circle relationship between sense of place and spirit of place—but we are more concerned here with approaching consciousness and unconsciousness in terms of sensory and cognitive operations that will ultimately create a way of working toward sense of place visualization. Yates et al. describe the unconscious part of the mind system as being divided into two main parts, the sensory mind—further composed of various sub-minds— and the discriminating mind. In their model the sensory mind is composed of the information processing of the five physical sense categories, generating moments of sight, smell, sound, etc. Their conception of the discriminating mind is that it is largely concerned with cognitive processes of thinking and emotion. It is in the discriminating mind where reasoning and analysis also occur. All of the sub-minds of these systems, function simultaneously and automatically (Yates et al., 2015 p. 184).

Yates et al. (2015 p. 439) continue, to define the concept of a sense-percept, they summarise this as 'the basic sense datum from which perceptions and concepts are formed.' In the manufacture of a sense-percept, they describe

the process as beginning when information comes in from the external word through the physical senses, this happens at a subconscious level and as a sub-mind receives its associated raw sensory data, the sub-mind performs a filtering function that takes some stimuli and creates mental representations of the information (Yates et al., 2015 p. 185). They (Yates et al., 2015 p. 439) claim 'The study of illusions and ambiguous images has demonstrated that the sensory mind actively and pre-consciously organizes, interprets, and attempts to make sense of its input.'

In this articulation of the model, these sense-percepts, still at an unconscious level, are 'recognized, categorized, analysed, and evaluated in terms of their immediate importance...' (Yates et al., 2015 p. 185). At this point and still at an unconscious level, these enriched representations can be stored in an inventory or 'database' of sorts for later interpretation of associated sense-percepts and information. At the end of these processes, the sense-percept is projected into the peripheral awareness of consciousness. Yates et al. reason that it is at this point that the sense-percept can become the object of a moment of attention. They point out that most sensory information remains at an unconscious level of awareness, being filtered out at this level and not reaching a stage of attention awareness.

After receiving attention in the conscious mind, the sense-percept becomes available to the discriminating mind, which can assimilate the data by 'further processing these sense-percepts and transforming them into more complex mental representations—in other words into perceptions' (Yates et al., 2015 p. 186). This occurs in the model by means of combination with memory, previous sense-percepts, other stored information, hedonic or emotional feelings, and the imagination, which can also play a role. They maintain that these combinations occur in various sub-minds of the discriminating mind, with each sub-mind taking from consciousness the information relevant to its particular job. After the perception has been processed in these various ways, the result may be projected back into consciousness thus becoming available to other sub-minds, and as they (Yates et al., 2015 p. 186) state 'each sub-mind acquires more and more information relevant to its purpose, it organizes that information into its own continuously evolving model of reality.' One of the ramifications of this model is that various independent sub-minds can and do

have divergent models of reality, with an argument of sorts taking place within the mind to a degree and composing various sub-mind alliances. Conflicting perceptions are an interesting area, and relevant to a degree—as we can have various perceptual understandings related to sense of a particular place—especially if it has a complex history or where aspects of history are perceived of as unpleasant; as is the case with elements of the South Georgia whaling history.

Yates et al. (2015 p. 439) define perception as being 'the process of achieving awareness and understanding of the environment by further organizing and interpreting sense-percepts." In this way they describe perception as being shaped by both 'top-down' and 'bottom-up' forces— learning, memory, and expectation at one extreme and sensory inputs and sense-percepts at the other. The process described is quite a complex one, but also one that they point out takes place outside of consciousness, therefore seeming effortless (Yates et al., 2015 p. 439).

By definition in the Yates et al. model, sub-minds belong to either the unconscious sensory or unconscious discriminating mind. They perform their own tasks independently and simultaneously, with each able to bring content into consciousness and each able to initiate actions. According to Yates et al. (2015 p. 191) the 'conscious mind provides an "interface" that allows these unconscious sub-minds to communicate with each other and work together cooperatively.' In their understanding, the conscious mind both receives and disseminates information, as when information is conscious it becomes immediately available to all the sub-minds, allowing the sub-minds to interact with each other through consciousness. This appearance of consciousness is considered to be an experience of the ongoing stream of the individual moments of consciousness strung together. Yates et al. (2015 p. 151) ask 'If the contents of one moment are gone before the next arises, how do we ever put it all together so we can understand what is actually happening?' Their answer is that the moments are combined and integrated in working memory, an occurrence of brief storage and processing—whose product is projected into consciousness as a 'binding moment' of consciousness.

Yates et al. (2015 p. 436) expand on this process of binding moments:

The question of how information from different senses gets combined is one aspect of a much larger question known in cognitive science as the 'binding problem'. Specifically the process by which different sensory modalities are combined is called **perceptual binding**. The process by which something currently sensed is combined with memories and stored concepts to produce recognition and identification is **cognitive binding**. The process by which internal and external information of every kind is combined to produce the experience of a unitary 'world' or 'reality' is called **phenomenal binding**. It's through binding moments that the products of the different binding processes become conscious.

This leads us to consider sense of place as a product of a type of phenomenal binding under the model.

The importance of the binding moments of consciousness to our experience of our consciousness and minds is pointed at by Yates et al. in their relation of the Yogacarins' system, who first described the narrating mind. The Yogacarins considered the narrating mind to be a distinct mind within the mind system, and that binding moments of consciousness are produced by the narrating mind. Yates et al. (2015 p. 439) relate:

The Yogacara thus describe the mind-system as consisting of eight minds. The first five correspond to the physical sense consciousnesses (visual, auditory, olfactory, gustatory, and somatosensory). The sixth corresponds to the mind-sense, or consciousness of mental objects. Binding moments of consciousness produced by the narrating mind are the seventh. And the eighth is the unconscious mind that is the source of these seven consciousnesses

However, Yates et al. consider the narrating mind to be a sub-mind of the discriminating mind—as a more useful description for their current model.

The moments of consciousness model provides a basis of understanding about the operation of mind at a fundamental level—albeit a simplified one—that we are not normally conscious of. This understanding in turn allows us to consider ways that visualizations can more fully interact or speak to mind. The artist-practitioner can act in some sense as a surrogate consciousness of the mind system of the viewer, creating a conduit of intention and projection into consciousness for the viewer's mind system to respond to in the ways outlined

from the model. The artist-practitioner traditionally proceeds with this task of visualization more or less unconsciously—but in a way that nevertheless speaks to various sub-minds of their audience in communicating both sensory and discriminating information that requires personal processing and awareness in order to become meaningful for the viewer. The earlier definitions of 'visualization' in Chapter 1.2.5 that describe both a produced representational image of the unseen and the use of the mental imagination in its manufacture, can also benefit from a third meaning—which would be to put an image before the mental imagination of the viewer. This use of visualization speaks to the processes of binding that can occur only in the mind of the viewer, and the complexity of the representation achieved by the reception of a work of art or practice in the consciousness of the viewer. Further to the exploration of the performative in art, there is also an effect of the experience of art practice, that can potentially enable the viewer to not only operate their mind in relation to the performative work, but also to become more aware of the operation of their mind as it interacts with the various elements of the work. The remaining sections in this chapter provide an account of work that is meant to provide this metacognitive context by providing an embodied sensory experience with references to the viewer's binding moments of consciousness, opportunities for meditation on the projection into consciousness of sensory and discriminatory mind operations related to the representation of South Georgia whaling station remains.

# 5.2 Grytviken Olfactory Installations



Illustration 27. Grytviken Olfactory Installations, photo by Kieran Baxter

This installation conveys olfactory sensations that speak to personal memory as well as relate to selected sites and conditions at Grytviken.

Perhaps like no other sense, the sense of smell seems to be intrinsically linked to memory and emotion. For Grytviken Olfactory Installations, I prompt associations of smell memories (or sense-percepts) that are previously existing within the participant, these associations and memories are called up within a new context—that of South Georgia—and in a way that gives the exhibition a range of smells and experiences that challenge the visitor to add new contexts to their memory of a scent or a combination of scents. In this way people can consider their linked memories to particular smells, visitors may pay attention to their inner process of engaging with the smell from their own recollection, and in the challenge of applying the memories to the new context in the exhibition—they have the potential to become more aware of changes in their binding of sensation, thoughts, and memories with concepts of place. In the future, some of these smells—which are mainly common every-day, home type smells—may even trigger memories of the SG exhibition. The experience of Grytviken Olfactory Installations provides an environment where a fuller sensory experience helps to embody the experience of the exhibition. Smells selected to represent South Georgia, were chosen to be primarily positive ones drawn from the aspect of living in a close, tight-knit community, rather than from the processes that the whalers were engaged in. An example—not used in this exhibition—of a recollected smell from my experience on the island is the musky, strong odour of male fur seals. This was a strong animal aroma and not pleasant to encounter, but over many weeks of exposure and alongside experiences encountering fur seals in close quarters and a building of the appreciation of the animal, this odour can now have a positive connotation for me. If I encountered it I would have a strong memory/emotional response that would be on the whole, positive. However, this fur seal smell is not something a typical newcomer to it would relate to in a positive, or even a neutral way. Another example might be a ranch worker with the smell of horses and cattle that they might associate with a pleasant time in their lives and reflect positive aspects of a human/animal relationship they formed, whereas someone raised in a suburban or urban environment, might only note the smell of horses and cattle as unpleasant.

An expectation for the olfactory installation could be a historically reconstructed realism in scent reproductions from the site. Historical accounts

describe Grytviken in operation—at least in the whale processing areas—to be an incredibly foul-smelling scenario by implication of the nature of the work (Headland, 1992, p. 118). In the workflow leading up to the processing of the whale carcasses the whales would be killed in the open sea, then more whales would be added to the ships towing line, with carcasses trailing behind the ship until it was time to bring the haul ashore. By this time the carcasses would be bloating with decay, gasses of corruption building up in the cavities of the whale corpses. Another factor is the sheer size of these bodies, the volume of blood, entrails, fat, and decaying flesh meant that the smellscape of the station was dominated by unpleasant aroma. Add to this the industrial contribution of fuel, the rendering of whale blubber, baking of bone fragments and meat to extract oil, and livestock area of the station pigs, who often dined on the whale detritus. I made the decision to not include references to these challenging odours for several reasons. People are hesitant to reach out with their olfactory sense as it is; a repugnant odour feels like a trick or practical joke on the guest rather than a meaningful statement. In addition, a typical visitor to the exhibition would not have a similar exposure to any unpleasant aroma found on the station within its context. There is also an argument that is the absence of these odours provokes their mental consideration. People have quite vivid sensory imaginations, and will question the absence of industrial whale station odours, while perhaps being relieved that there are not any. Men working at the station would have acclimated to the odours and generally speaking—it would not bother them as much as it would a non-whaling visitor. Another consideration is that the olfactory installation presented here in this installation is not drawn from the production sections of the station. The represented part is the village section of the station mentioned in Chapter 3.4

and represented in Grytviken Stopmotion Photowalk 1.



Illustration 28. Grytviken Olfactory Installations, photo by the author

Therefore, to represent this village section, generally pleasing odours were chosen—as these sites did generally contain pleasant aromas. Some selected aromas do present some challenge to the visitor, such as the cured meats and the cheese, which were allowed to be somewhat ripe but not to the point of a smell of decay. My approach to the various locations referenced by the scents in *Grytviken Olfactory Installation* was to represent the site with a photograph of the related building or ruin and then choose three different blends of olfactory materials for the site. The ingredients in each scent combination were contained in drinking glasses and placed on shelves positioned at a height that guests can lean over the shelves to smell above each glass containing the olfactory representation. Odours were balanced so that the distance between each did not interfere with smelling a particular glass, yet combined for an overall effect for each of the five locations listed as follows.



Illustration 29. The Slop Chest Olfactory Installation

#### 5.2.1 The Slop Chest

A company store for the whalers, the Slop Chest was a place that a worker could purchase luxuries or extras beyond their company meals and provided furnishings. The first container holds different forms of chocolate, roughly cubed dark chocolate mixed in with cocoa powder. In the second there is fragrant loose tobacco, matches, and rolled cigarillos. The final container holds a selection of historical hair pomades, brands that historically existed during the time of the station's operation, as well as an aftershave.



Illustration 30. The Coffee Roasting House Installation

## 5.2.2 Coffee Roasting House

This building was used to both roast and grind coffee beans for the station to consume. The first container holds roasted whole coffee beans, the second a very coarse rough grind of roasted beans, and the third holds finely milled coffee beans.



Illustration 31. The Provisions Store 3 Olfactory Installation

#### 5.2.3 Provisions Store No. 3

Used as a larder for food storage, the first container holds a selection of cubed hard cheeses, the second a blend of aromatic spices and herbs, and the third container holds examples of cured meats.

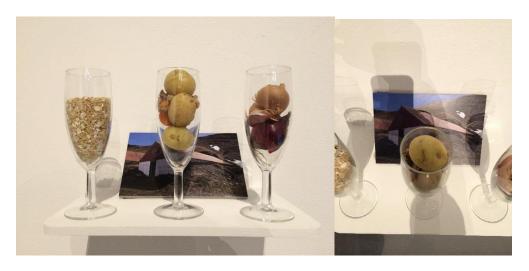


Illustration 32. The Potato Store Olfactory Installation

### 5.2.4 Potato Store

Another larder for food storage, this building was given the sobriquet of the Potato Store, although it likely contained other types of food in storage as well. The first container holds a blend of oats and brown rice, the second contains potatoes, ginger, and galangal ginger—which helped to establish the earthy aroma of a great deal of potatoes in storage. The third container contained yellow and red onions, and garlic cloves.



Illustration 33. The Old Bakery Olfactory Installation

#### 5.2.5 The Old Bakery

This building at one time baked the station's bread although the structure is gone; some of the bakery equipment and the foundation remain. The first container holds a selection of heavier bread products such as pastry and fruitcake, the second container contains a watery rising dough with a live yeast culture, and the third contains a selection of rye, whole wheat, and sourdough breads.

Grytviken Olfactory Installations was conceived of as an exercise in promoting moments of noticeable binding consciousness. The olfactory installations are intended to stimulate guests to consider mental objects that occur as part of their exposure to the installations, memories may surface prompted by certain smells and emotions may be triggered. The exhibition as a whole and the situating of the olfactory installations as part of it, also encourages thoughts either investigating the memories and emotions aroused or even more significantly attempting to link these mental objects with the other information coming in as part of the larger exhibition. The invitation is to a conscious consideration of these processes but the binding moments—the integration of different conscious moments—occurs even at levels that may not be overtly noticed by the guest. The argument can be made that anything, any sensory experience, exemplifies these processes just as well as anything else. This chain of the moments of consciousness is always happening, and is always present in our mind for reflection and discovery. This argument is true in many ways, but the gallery space—and of art in any form—promotes a certain type

of approach to reflection. The awareness in the viewer of the artist's intention in creating, choosing, and contextualising experiences for the viewer causes a certain openness to reflection about meaning, both public and personal. The olfactory installation intention was that it contained the potential to produce some personal identifications or entanglements with the South Georgia broader subject. Producing moments of olfactory consciousness beyond the typical gallery smells of fresh paint, electricals (from the projection technology in the room), smells from the reception food and drink, and from the other guests. These gallery associated olfactory sense objects also play a role in the sense of place established for the gallery exhibition, part controlled and part random or self-determining in the sense of guest contributions.

Creating the olfactory installation—that is all the steps that go into thinking about components, doing tests, considering the audience, the purpose of the work, the execution and being present in the space while people interact with the installation—brought me through some reflections about the olfactory sense.

Smell consciousness is a very intimate sense and sensation, people are vulnerable in smelling. After all it—along with taste—is a sense that takes the very substance of an external subject and incorporates it into our own bodies. Molecules of whatever we smell come into our very being in the activity of olfaction. Unlike light—in this sense is a sterile delivery mechanism of an image of the external substance—which provides a safe distance. Touch is intimate as well, but involves the protective boundary of flesh, we know that we can wash our hands. Once we smell something—it is already inside of us. This makes the use of olfactorisation (producing smells, in the way visualization relates to an image) an extremely delicate operation. Olfactory installation can bring a sense of playfulness or novelty, but controlling subject perception of aroma can also be quite a serious business. Food industry sensory analysts show the opposite side of the spectrum (Sidel and Stone, 1993), a 'nose' in the wine industry or in French, 'le nez', is a respected and well-paid occupation. These professionals are highly skilled at analysing aroma characteristics and being able to describe effects. Typically these are not public facing jobs but are part of the production of wine, pet food, human food and beverage, and other products.

Grytviken Olfactory Installation causes us to connect and identify with the whalers in an intimate way; we consider their embodiment in these conditions of smelling their morning coffee before a hard day of work, enjoying the taste of freshly baked bread, using grooming products for perhaps a special evening's entertainment at the station cinema, and so on. The installation also works on a deeper level connecting and entangling our own olfactory influenced Proustian memories and associations and then mixing them with the concerns of South Georgia. This becomes a memory event, brought on by the exhibitions different sensory approaches, providing a rich embodied experience. The olfactory installation also draws attention to the act of smelling itself, by placing it within the gallery environment, we bring olfaction into conscious awareness and consider the associations we have with smell and by extension the other senses and mental objects that we form.



Illustration 34. Grytviken Olfactory Installations, close ups

The above close ups of the installations are in ordered rows from the top: Slop Chest, Coffee Roasting House, Provisions Store No. 3, Potato Store, and Old Bakery.

# 5.3 Flensing Plan Mandala



Illustration 35. Flensing Plan Mandala exhibition, photo by Kieran Baxter

## Twelve minutes running time.

Flensing Plan Mandala invites the viewer to walk around it, examining the imagery where up is to the perimeter, and down is to the centre. This kinesthetic sense activation intends to mirror the artist's journey turning around the site to photograph the flensing plan at Grytviken. Ultimately the centre of the installation should be occupied by the viewer as the images fade from one viewpoint to the next, incorporating a subtly altered landscape to the striking sound of the singing bowl.

Rather than presenting a visualization on a screen, or a picture plane in a traditional manner. Flensing Plan Mandela is projected on the floor surface, to better situate the viewer within the image in a reference to embodiment. There is a space at the centre of the image where a viewer may sit on the floor; this is the ideal vantage point for the experience. Viewers may also walk around, or look from the sides of the image. Standing in the centre of the image is not advised as the projector casts a shadow from a standing viewer. Projectors do not project from the lens to the centre of an image, this means that an object in the centre of a projected image would cast a shadow onto the image and not directly below one's position in the centre. Seated, one can turn one's head to examine the image around them and also twist the torso (or shuffle by turning on one's seat), sitting on the floor in the gallery might present physical challenges to some, chairs are nearby that could be utilised if need be. However, Flensing Plan Mandala can be seen quite well from outside the image. The position on the Grytviken flensing plan changes through the progression of the piece in an effect similar to that of teleportation. The position of teleportation, between all the represented positions, align spatially with one another according to the directions and orientations of the site. One way to see this is to look at the circular image at the 12:00 o'clock position.



Illustration 36. Still from Flensing Plan Mandala, digital file

This is where a navigational pole that exists on the site has been orientated, with all images subsequently lining up with this same orientation. This placement is also an allusion to the suspension of the passage of time in the image, creating a mood where one can reflect on the different vantage points presented on the flensing plan which can be considered simultaneous in objective time. The white circle at the centre of the image creates a spotlight effect from the cast projection light. In this circle on a small cushion is placed a metal singing bowl used in meditation. Singing bowls are used in some meditation practices (Jansen, 2002). As the images progress in the piece, the fading transitions are accompanied by a 'strike' recorded sound of a singing bowl. The mallet in the bowl is also aligned with the 12:00 o'clock position in accord with the navigational pole, although this may be disturbed by visitors in the course of the exhibition. Guests are welcome to strike the bowl or experiment with the sounds it can produce. In the latter half of the piece when the images are doubled and reflected, the singing bowl sounds with two strikes.

The process of taking the photographs was accomplished with a tripod and camera set-up, where overlapping photos were taking in 360-degree rotation and then stitched together in software and distorted to achieve the spherical effect seen in the image. Vertically several rings of 360-degree panoramic bands or rings were taken, so that the photos overlap both horizontally and vertically, or longitudinally and latitudinally. These photographs have been taken at high resolution for archival and reference purposes and they exceed the resolution of the projector used. This also allows *Flensing Plan Mandala* to be realized at a much greater degree of resolution and detail in the future, for example in print, or by using a VR system, or a higher resolution 4k projector.

Walking as a conceptual outlook for the way to look at the site has been my primary consideration in sensory perception of being present at Grytviken. In *Flensing Plan Mandala*, I turn the view from walking around something looking at it, to one of being located in a spot and then turning perception to look out from that location—we obtain a different sort of image and awareness with this outlook.

In many ways the flensing plan was the centre or heart of the whaling operation. This was the area that the whale carcass was winched onto land

from the sea. As the enormous carcass was brought to the shore, chains wound in rope were attached to the carcass and powerful winches pulled it to the plan. Even as it was moving; flensers would be at work on the carcass slicing the blubber in long strips that were sized to feed into the chute of the blubbery cookery. This was the most easily rendered into oil of the whale parts. After the blubber was separated—the carcass continued its journey—lemmers stripped the meat from the carcass, and bone saws were used to portion the parts of the skeleton into sizes that could be processed. The winches dragged the different sections to different processing areas around the plan, up one ramp to the meat loft, and up another to the bone loft. The flensing plan was the core area of the station; it is also unique in the form of its structure in Grytviken compared to the other buildings and areas. It was formed of a wooden floor that was exposed to the elements—not covered by a roof or sheltered with walls—instead the planked floor and the various built structures surrounding the space established it as the flensing plan. Through the years of its operation the plan would be maintained, and boards replaced as needed. The workmen were exposed to the elements here as they worked under the South Georgia sky and the expected standard of employment was to process as many whales as possible, as quickly and efficiently as possible. There is little left of this wooden flooring today, when I visited the site you could see some remnant of the wooden floored plan in a small area and there was a great heap of the giant rusting chains used to drag the whale carcass, some chains still partially covered in their fraying rope sheaths.

On the flensing plan post-whaling, it feels very peaceful and very quiet in contrast to the hub of activity it was when in operation. Going through the contemporary station ruins, you come into the plan almost like entering a clearing in a forest. Space opens up in front of you and there is an expansive feeling as you move into the plan. A small stream runs through the plan down to the bay, draining from higher ground and glacier melt water. The plan had been built elevated over this stream, so that it would have ran hidden from view. This feeling of a space for meditative reflection on the former reality of the whaling station takes inspiration from the visual sense, but the object to consider in consciousness is our association to the events that took place on the plan, and by extension the entire station. As the village area represents

the communal worker aspects of the station, the flensing plan as a singular site represents industrial whaling in its full reality for the station.

The meaning, or binding moment of consciousness, intended for the viewer is to integrate their thoughts on the reality of the flensing plan usage in whaling with the presented image, a representation of the site as I encountered it on my visit to the island. They are asked to reflect—or direct attention and awareness on their consciousness of this binding moment—considering how their consciousness is integrating the sensory information and the mental objects (thoughts, emotions, and memories) associated with the flensing plan and by extension the industrial whaling industry in general. There are signals to the viewer of these intentions for their experience: the titling of the piece as *Flensing Plan Mandala*. A mandala is an image intended for meditation, traditionally circular in form—but not normally viewed from within the centre.



Illustration 37. Mandala of Vishnu, Painting; Pata/Paubha, Public Domain

Putting the ideal viewpoint of the image at the centre changes the intention slightly, placing us within the image as part of it. However, this is not counter

to the traditional use of mandalas—and indeed it moves it closer to the intent—where the image is a symbol for the forces playing out in our own minds and consciousness. The traditional placement of the viewer outside the mandala is practical for logistical reasons, but the intention is for the view to enlarge in the mind's eye until it is not necessarily perceived as a separate place, but a location the meditator internalises and occupies. Likewise, although circular in form, mandalas traditionally possess a picture plane orientation—that is objects are orientated in the space to have a right side up and down according to the viewer's position external to the image. There are often elements within the picture plane that are orientated around the centre, but we often have a central figure whose orientation gives us the external orientation.

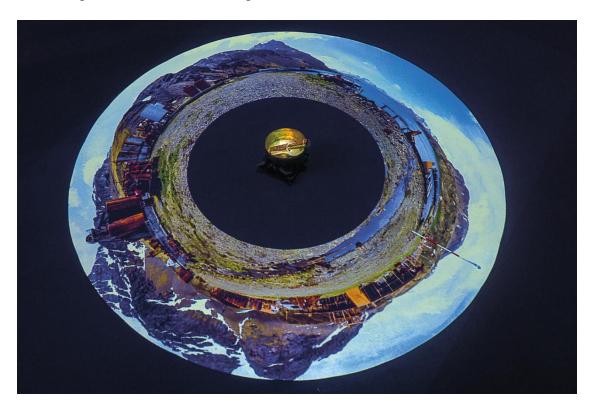


Illustration 38. Flensing Plan Mandala 2016 exhibition

In *Flensing Plan Mandala*, the picture plane for all content is orientated so that 'up' is away from the centre and 'down' is toward it. This way the viewer from inside can look naturally at any view from the centre and be 'right side up.' This orientation, from within the image, speaks to the immersion possible with digital media technology, and makes the point that for reflection on sensory consciousness, the provision of a virtual space or viewpoint (presence and embodiment within the image) provides a way to reflect on the subjects with our awareness. These subjects include the six senses, the five in the

traditional western tradition and the sixth sense of perceiving mental constructions such as thoughts, emotions, and memories, as well as the metacognitive sense to consider these constructs in the mind's operation.

Part III Results and Conclusion

Chapter Six: Results

6.1 Summary of the research aims and approach

As expressed in the epoché and bracketing exercises in Chapter 2.3.1 and 2.3.2, the aim for this research project is to enable a wider public understanding of the historical context and cultural heritage of the whaling industry of South Georgia Island. In formulating the research questions, the importance of sense of place visualization was noted as a critical feature in the enablement of understanding of context and cultural heritage, and in the formation of representations. Sense of place for South Georgia was noted as an example of secondary place attachment, not primary—as in a location where a person is able to have been rooted in this place from birth and prior generations of family history.

Following these reflections, experience, and research—the primary research question was articulated as:

What would constitute an appropriate form of visualization practice for the artist/researcher as a newcomer to the South Georgia history, to enable a wider public understanding of the historical context and cultural heritage of the whaling industry of South Georgia Island?

A secondary research question was formulated dealing with the practice of visualization approaches to the project:

What new practices of visualization emerge from the attempts to answer the principle research questions about visualising Sense of Place in South Georgia abandoned whaling stations?

Methodologically, this thesis identifies practice that rests on a performative notion that incorporates visualization of sense of place as an element in representation. This idea of visualization explored in Chapter 1.2.5 incorporates both the formation of mental imagery in a pre-reflective manner, mental imagery in a reflective manner, and subsequent visualization by making external imagery though a process of prototyping (previsualization) and visualization. This handlability of visualized prototypes or previsualizations, creates a feedback loop or circle, incorporating reflection and reflexivity, between internal and external visualizations that eventually

results in representational work for sense of place, with sense of place having a similar circular feeding back relationship to the concept of spirit of place as demonstrated in Chapter 1.2.3.

Part I, Chapter 1.1 considers some of the unique characteristics of the history of South Georgia Island. South Georgia Island faces a set of challenges related to its industrial past of commercial whaling regarding its low habitation of non-permanent residents and how it sees itself developing in the future. Largely this is as a sustainably managed commercial fishery, as an area for scientific research, and as a protected natural habitat and tourist destination. The cultural heritage of South Georgia is identified as being an amalgam of different nations operating historically and in partnership on the island, with significant contributions from British and Norwegian nationals, many of whom are in living memory—as whaling ended there in the mid-1960s. This thesis focuses on the issue of the physical remains of the whaling stations in this context. The remains are extensive and there are issues of asbestos contamination, and health and safety—as the structures deteriorate. The station Grytviken has been cleaned up and can be accessed by the public, allowing access to the South Georgia Museum which is located there. The other stations on the island have controlled access, and are restricted to most visitors. Cleaning up the stations would require great expense, as well as perhaps altering the archaeological value of the sites. It is relatively recently that the remains have moved from being considered scrap to being seen as artefacts of industrial cultural heritage and of historical value.

Chapter 1.2 also reviews the concept of place, establishing place as a phenomenon that combines empirical and subjective realities—it exists both as independent of human life in a sense and yet is constructed by human experience through our attention and involvement. Place is necessary in our existence and often taken for granted. This 'given-ness' of place makes it particularly suitable to be examined through the lens of phenomenology, which as a perspective, encourages us to focus on our experience directly and consider pre-reflective ways of embodied knowing as a means of better understanding the intentional subject of investigation. Sense of place as a concept is introduced to shift slightly from the definition of place as partly empirical, and to focus on our experience of place. How it manifests in our

sensory perceptions—but also our memory, thoughts, emotions, and attention. The symbolic form of spirit of place is introduced and the relationship between the two is explored. Spirit of place is often transcribed as 'significance' and refers to the distinctive identity of a place. Sense of place can be thought of as the faculty of sensing place, and spirit as the form of communication, there is an interplay between the two. Individual sense of place can be shared and impact spirit of place in material ways, a strengthened spirit of place can impact the ways in which sense of place is formed and expressed. Visualizing sense of place is the focus of this thesis, considering ways in which the visualized can be interpreted. The mental imagery aspect of visualizing is explored, positing a distinction between pre-reflective imagery and conscious imagery, a subconscious sense of place and a consciously attended to one. This mental imagery aspect is then considered as part of the process in practice for an artist creating an external visualization, a circular feedback between prototype and final representation is then established as a working model. The value of working to improve and communicate sense of place is demonstrated as being linked to its fundamental connection to improving spirit of place. Improving spirit of place effectively means making places better, which benefits those involved in a particular place, as well as improvement of the associated region. Improved communication of sense of place and improved spirit of place expand our connections and the quality of those connections with the world. We are better able to see lessons learned in places—such as in South Georgia's slow recovery from its industrial exploitation of the whales and its current value as a unique habitat. This claim of the value of improving sensing of place is linked to the concept of authenticity as a cultural production arising from the creative construction of place.

Chapter 1.3 concludes by examining a variety of approaches that can be said to visualize or represent sense of place or spirit of place. This contextual research identifies traditional portrayals of real places as setting within animated narrative work either used as a meaningful environment for the character in a scene or as a feature of significance in a work. Additional context revealed an approach to a place-documentation style of representation as well as contemporary methods that steered attention toward sense of place

visualization from a nonfiction perspective. Content revealed the use of fictional worlds based on place elements of the real world—but taken to fantastical extremes in an interactive game environment that incorporates parts of whaling history. Of interest was an interactive application that features an environment recreating historical spaces containing fictional stories. A visualization of industrial heritage was consulted that revealed an approach of mechanical realism in the depiction of computer generated imagery showing functioning industrial systems. A personal story was revealed through an autobiographical interactive multimedia work using poetic place imagery linked to narrative. Finally, some examples of work done with the South Georgia whaling stations was considered, from the Centre for Remote Environments education application, live webcams streaming views of King Edward Point, Google Street View and Google Earth and Panoramio featuring geo tagged photography from the community of South Georgia visitors and the laser scanning of the whaling stations and museum-based interactive kiosks with industrial and cultural heritage content.

Review of this contextual research created a direction that attempted to present the whaling station site as it was encountered—in a multi-sensory manner—and without overt narrative direction or authoritative textual components of exhibits. Narrative content was included, but in a theatrical performance and textual content was included as an installation of works that relate to the site. In this way the exhibition was planned to create a rich sensory environment that would connect with visitors existing knowledge and sense memories, creating a place where intentionality was directed toward the visualization of sense of place for South Georgia. The nature of the exhibition was intended to cause the guests to consider how they visualize place (as relating to their own mental imagery) in a metacognitive manner, using the location of South Georgia as the subject. This choice was made to create memories and prompt cognitive considerations that might stay with the visitor, attempting to create an embodied connection with South Georgia and its whaling station remains—rather than focusing on mechanical demonstrations of industrial machinery and processes. Sense of place and spirit of place connections made with the audience are meant to encourage them to think about issues connected to place in their daily life and consider the meanings

and significances of the South Georgia whaling station industry and remains in a wider context, and carrying this sense of place knowledge forward into other areas of their lives.

Chapter 2 discusses theoretical perspectives on gathering, integrating, and constructing methodological tools for practice based research on visualizing sense of place. The ontological approach taken is essentially interpretivism, with an epistemological view that is constructivist. Theoretical perspectives have been informed by descriptive and interpretive phenomenology. The research methods are described as performative, with a resulting performative data type. The overall methodology can be conceived of as performative phenomenology. Specific methods include visualization practice, reflection, reflexivity, prototyping, and phenomenological reduction as interpreted in a performative framework.

Chapter 2.2.1 considers theoretical approaches to art practice as research. Known by a variety of names and still a relatively new field of research in the academy, art practice as research has grown by advocating the use or borrowing of methods from more established disciplines—in what is sometimes termed 'mixed methods research'. There is also the idea that art practice as research's methods should primarily be drawn from the visual arts practice domain. A brief history is outlined of the development and expansion of art practice as research in the UK following primarily from the post 1992 incorporation of polytechnics into the university system. The terminology of the more international term of 'art practice as research' is established in the UK by the Arts and Humanities Research Council (AHRC) in their 2007 report as being 'practice-led', and is considered a broad umbrella term. Art practice as research perhaps includes more of an emphasis on using methods drawn from practice alone rather than blended approaches.

Chapter 2.2.1 continues its exploration of art practice as research by looking at some researchers' assertions of its ability to create new knowledge. Many of these assertions can be based on the idea of an equivalence of 'understanding' to 'explanation' in the goals of research to create new knowledge. The paradigms of quantitative and qualitative research are discussed in terms of their explanatory and interpretive potentials being well understood, whereas

there is still resistance to directions related to practice as a discipline and its affinity with questions of understanding. A framework for identifying a practice as research project's position in relation to other research, as advanced by Sullivan (2010), is detailed with its description of empiricist, interpretivist, and critical positioning points of a triangular field.

Chapter 2.2.2 charts the relevance to art practice as research of phenomenology and hermeneutic phenomenology, sometimes referred to as descriptive phenomenology and interpretive phenomenology, or as phenomenology and hermeneutics. The emphasis on description for phenomenology relates well to the position of practice being aligned with 'understanding' as a goal of research. The emphasis on experience as a route to exploring phenomenon as they occur in consciousness—framed by intentionality—is useful in an art practice as research application. Hermeneutics adds a focus on experience taking place within culture. That the researcher, as a human being, is inseparable from phenomenon under investigation, as they are a part of the influence of everything that has come before. Therefore, research findings become a process of interpretation, where the researcher examines phenomena through historicity and cultural influence in what is described as a hermeneutic circle. Descriptive phenomenology posits processes that allow the researcher to set aside biases, assumptions, and judgements to focus on the phenomena in conscious experience whereas interpretive phenomenology regards these researcher attributes to be essential to the process of interpretation. Both phenomenological fields consider the 'data' that can be gathered and investigated as a wide definition, normally thought of as qualitative.

Chapter 2.2.3 introduces the concept of performative research as it relates to the concept of 'data' or in the practice as research outputs—as Haseman describes 'material forms of practice, of still and moving images, of music and sound, of live action and digital code.' Performative (symbolic data other than words or numbers) is established as an equivalent data type alongside quantitative (symbolic numbers) and qualitative (symbolic words) types (Haseman, 2006). This equivalence of performative research does not eliminate the need for words, the idea of an exegesis or document explaining

the process of investigation, conclusions, and so on provide the means of communication about the context of the performative output.

Section 2.2.3 continues with the notion of the performative, explaining the history of its conception in the field of language by Austin, its appropriation by Butler, and then its application to the outputs of art practice as research, describing their 'reality producing dimension' (von Hantelmann, 2010, p. 17).

In Chapter 2.3 the qualitative field of phenomenology is explored in relation to a correspondence to a performative phenomenology based on art practice as research. The methods of epoché and bracketing have already been summarised as regards the interpretation of the aims and targeting the research questions in Chapter 6.1.

Part II consisting of Chapters 3, 4, and 5 contain the performative correspondences of the phenomenological reduction—summarised in Chapter 6.2.

- Part II of this thesis contextualizes the exhibits that formed the exhibition of practical work created during the project. Methods around each exhibit's formation and the context is explained with characteristics of the practice and material output. Processes from phenomenology correspond here to art practice as research methods, namely horizonalization, delimited horizons, invariant themes, textural descriptions, imaginative variation and the identification of structural qualities and themes—are all expressed as part of the practice and resultant outputs. Following from Chapters Three, Four, and Five describing performative work equivalent to the above methods of phenomenological reduction, the textural descriptions and structural qualities—with associated synthesis—is found in this section in Tables 2–10. Following these tables is Table 11 which displays the structural themes identified in the works.
- 6.2.1 Textural descriptions, structural qualities, and exhibition synthesis
  This section presents tables for each exhibit in the exhibition containing the
  descriptive qualities and the resulting synthesis for each on the pages that
  follow.

Table 2. Synthesis of textural and structural descriptions of 3.2 Photogrammetry Walks,			
Grytviken			
Textural descriptions		Structural qualities	
Rotational views		Circumnavigation	
Time consuming	Rhythmic	Condensing several months of time	
		and physical movements into one	
		visual/spatial representation	
Overlapping	adjacency		
Communicating in	Three-		
an instant	dimensional		
	representation		
One visual-spatial	Each place		
representation	related to		
	overall region		
Each moment	Each position		
Map of movement	Map of		

structure

Section 3.2 focuses on *Photogrammetry Walks, Grytviken* where an account of the photographic process that informed all Chapter 3's work was accomplished. The 'photowalk' method was developed here where rotational views of the subject are captured in a time consuming and rhythmic method where the subject was circumnavigated, overlapping paths with other adjacent subjects of the overall site. *Photogrammetry Walks* is a single image, and captures these numerous walks—and the instant of photography happening during each walk—communicating them all in one instant. It condenses several months of my time and physical movements into one visual and spatial representation, creating a map of movement and structure. The photographer is captured at each moment and position as well as visual and spatial characteristics of the subject from each viewpoint. Through software, this photogrammetry builds up a three-dimensional representation of each subject and relates it to the overall site.

Table 3. Synthesis of textural and structural descriptions of 3.3 Photosynth Walk, Grytviken		
Textural descriptions		Structural qualities
Smoothly	Stitched together	Abandonment
connected		
Expanded time	Unearthly	Renewal
Distortion	Breaking apart	Repurposing
Illusion of real	Complexity and	Haunted
time	breadth	
Ruins	Dreamlike	Mentally stored spatial information
Reconstructed	Compressed time	Conflation of sensory experience
space		
De-peopled	Outside of time	Visualization of the site in the
		viewer
Glitching		
elements		
Meshing of	Apparently	
disparate	seamless	
elements construction		

Section 3.3 works in other ways with the imagery collected from the original photowalks. Photosynth Walk, Grytviken used a web based software process to stitch separate images together that were taken on photowalk excursions. This effect creates a point of view from the photowalks that feels smoothly connected in a three-dimensional spatial journey around the site. From the earlier image, time has expanded, and the view is presented in what feels like a real-time journey around the site, although the photography again took several months—and this piece lasts only 51 minutes, 5 seconds. It reveals the complexity and breadth of the places at Grytviken. As the digital process used to create the piece depends on algorithms and matched points, there are often glitches and small errors in the process. These manifest in a way where the imagery feels photorealistic but sometimes breaks apart and comes back together, or stretches to a point of distortion and then comes back. The video stabilisation process of the algorithm also creates an unearthly smoothly gliding feel to the footage, when combined with the glitches this comes across as a visual metaphor describing cognitive mappings of spatial environments. Despite the distortions, the viewer feels as though real three-dimensional space is communicated in the piece and there is no problem in forming an awareness of the spatial features of the site. The different subjects' photowalks have been blended together in video editing software, to transition between adjacent sites in a way that feels like travelling smoothly from one to another—overlapping sections of the walk. The accompanying audio track is created from samples of whale song and is adjusted in the gallery space to blend with other audio sources, it creates a context for the display of the ruins that works effectively with the pace and dreamlike quality of this video, creating a haunted feeling. Taking the time to view this longer video work, brings a confrontation with issues of industrial abandonment, although one also sees forms of renewal and repurposing of places at the site.

Table 4. Synthesis of textural and structural descriptions of 3.4 Grytviken Stopmotion
Photowalk 1

Textural descriptions		Structural qualities
Relatively small	Repurposed	Perception of long range apparent
portion	buildings	motion
Communal needs	Static views	
Flow based	Informational	
immersive quality	context	
Temporal	Illusion of real	
ordering	time	
Anticipated views		

This work visualizes a relatively small portion of the station. Focusing on a region that is relatively intact—although incorporating some ruins and remains—and that has been largely repurposed in buildings supporting the operation of the South Georgia Museum based in Grytviken. Formerly this area housed administration and buildings related to the communal needs of the working men. This work presents the views of the photowalks in this area in a form of stopmotion that is very different from the effect achieved in the photosynth effect of 3.3. Instead the numerous source pictures are considered as frames in an animation format, albeit one that has relatively large gaps of point of view movement between frames. This effect also presents an illusion of moving around the building in a real-time format, although it is accomplished in the animation much faster than it would take to walk around the positions represented, at a length of 4 minutes and 2 seconds. There is an effect of perception of apparent motion in animation, and with large gaps between movements this effect is named 'long-range' apparent motion. Considered to be processed differently in the brain than short range apparent motion, this effect is assumed to involve more—or different—cognitive processing to result in an awareness of the threedimensionality of the structures and space involved in the representation. It is possible that this function requires a more task based orientation and involvement, possibly resulting in a flow based immersive quality to the experience. Soundtrack to accompany the animation was selected as a 1913 recording of the traditional British seafaring song 'The Sailor's Hornpipe' to acknowledge the concept of Grytviken—and all the shore based whaling stations on South Georgia—as a 'ship ashore' (Basberg, 2002) as well as the hegemony of the British on the island in terms of licensing the stations' operation. Intertitles have been placed between the sections of the animation to provide some informational context to the buildings' and remains' historical use. These have been fashioned to resemble silent filmera intertitles. The form of the walk for this region is revealed by the viewer's immersion in the point of view of the camera, spatial characteristics are communicated in the animation through a temporal ordering and presentation of static views that provoke a perception of apparent motion, likely through a facility of long range apparent motion. Views may be anticipated slightly in the viewer's interior rotation of an internalised model of the structures presented. The audio-visual qualities of this piece worked well positioned across at the gallery entrance, displayed on a monitor affixed above a table containing pamphlets for the exhibition and refreshments at the gallery reception.

Table 5. Synthesis of textural and structural descriptions of 3.5 Stopmotion Walks, Grytviken		
Textural descriptions		Structural qualities
Multiple views	Location adjacency	Constant flux of change
Six views visible	Black and white, colour	Delimiting a view of the world to a particular focus
Subtitles	Historical use	
Archive or database	Snapshot in time	Peripheral awareness and attention
Prioritise subjects	Overwhelming effect	
Maintained focus	Dismiss as peripheral	
Viewing difficulty	Challenging nature	
Maintaining	Sensory	
Grytviken	overload	
Large complex picture		

This exhibit incorporated the stopmotion presentation of views as in 3.4, but instead of connecting the different positions of the building and remains, the rotational views of the buildings remains apart and instead multiple views are presented on screen of the different locations adjacency. These views then proceed in an orderly way across the screen, so that six views are visible at one time on the screen, with a one off one in progression to show the >>80 different locations. All views are presented in black and white except for a central view that is presented in colour, with subtitles labelling the historical use of the building or remains. This presentation conveys the idea of the archive or database created during this project that can document a snapshot in time of Grytviken in its constant flux of change. There is an overwhelming effect of the display at first as so much appears to be going on, however if the focus is maintained on the colour picture and subtitle, with the other views dismissed as peripheral—then the desired effect is achieved in the viewer. The viewing difficulty parallels the challenging nature of being aware and maintaining a site such as Grytviken, limiting a view of the world to a focus is a practical solution to sensory overload; however, being open to a large complex picture is also important to prioritise subjects within the larger picture. The progression of this piece takes 7 minutes 34 seconds and covers the views of the station presented in 3.3, this compression of the time it would take to walk around the entire station is quite an extreme one, presenting a complex overview. This sequence can be considered a previsualization for an interactive method to access the database of photography obtained on this project and is returned to in 6.5 Future work.

Table 6. Synthesis of textural and structural descriptions of 4.2 Leith Slideshow			
Textural descriptions		Structural qualities	
Cleaned-up	setting	abandonment	
contrast			
Asbestos and	Less frequently		
dangerous	visited		
structures			
remoteness	Decayed and		
	deteriorated		
Undisturbed	Experience in		
	travelling		
slideshow	Haunted vision		
Lively and			
peopled			

Leith Slideshow is a series of photographs resulting from an expedition from Grytviken to Leith station via Stromness and Husvik. It was included as Leith station is dealt with as a setting in *A Cinema in South Georgia*. The exhibit also provides a contrast to a 'cleaned-up' Grytviken, where asbestos and dangerous structures have been removed. These stations are visited much less frequently than Grytviken, due to hazardous conditions as well as remoteness from the settlements at Grytviken and King Edward Point. The structures have been left in situ and have decayed and deteriorated in place relatively undisturbed. Section 4.2 follows an account of the journey to the station and some of the experience in travelling on South Georgia Island, photographs are presented in this exhibit in a straightforward way—without digital manipulation or embroidery—as in a tourist or traveller's slideshow might be constructed. It provides a haunted vision of reality that is countered by the play performance's communication of a lively and peopled human environment.

Table 7. Synthesis of textural and structural descriptions of 4.3 A Cinema in South Georgia		
Textural descriptions		Structural qualities
Theatrical	In the midst	Personal experience
Cultural memory		Tangible and intangible heritage
narrative	Intimacy	Narrative transmission
Fictional	Performance	
Intangible heritage	Tangible heritage	
Interweaves historical details	Strengthen communicated sense of place	
Daughter of a whaler		

Staging the theatrical production *A Cinema in South Georgia* (Wilson and Mayhew, 2016) in the midst of the 2016 exhibition allowed another form of cultural memory to be shared with the visitors. Susan Wilson is the co-author of the play and is the daughter of a whaler who worked at South Georgia Island. Her personal experiences—as well as interviews with former whalers—create a narrative that interweaves historical details with perspectives of the fictional trio of whalers contained in the play. The performance of the play within the setting of the exhibition, allows the visitors to experience intangible heritage brought to life through performance—while the tangible heritage is confronted through the other exhibits' approaches. The intimacy with characters and situational contexts presented in the play, strengthen the communicated sense of place instilled in the viewers and linked to the visual, audible, and spatial characteristics of the exhibits listed in chapter 3.

Table 8. Synthesis of textural and structural descriptions of 4.4 Texts		
Textural descriptions		Structural qualities
Authored materials	Vintage	Reflective atmosphere
Sensory modality of touch		Forms of material memory
Conducive to learning	Clean-up operation	Networked information age
Handling Cognitive process		knowledge derived from cognitive process
Interest and time Personal resonance		Knowledge transmission
Synthesis		

Texts consists of authored materials relating to South Georgia and Grytviken arranged on a table with a reading lamp and chair. The first text is the hardbound edition of The Shore Whaling Stations of South Georgia- A Study in Antarctic Industrial Archaeology (Basberg, 2004) and the second is a vintage pamphlet published by the South Georgia Museum written by museum founder Nigel Bonner (Bonner, 1993) describing Grytviken before the clean-up operation that began in 2002. The exhibit helps to establish a reflective atmosphere—conducive to learning more about the stations and provides the sensory modality of touch in the exhibition by inviting the handling of the pamphlet and the book. The exhibit works to establish these reflective moods for the exhibition even if the visitor does not peruse the materials, pointing out by their presence the use of texts to create forms of material memory that are shared in this way. The presence of *Texts* underlines the reality of our networked information age, where vast bodies of knowledge—externalised knowledge derived from cognitive process—are readily available if the interest and time are there. The exhibition in general steers clear of providing extensive written material for this reason, choosing instead to evoke a visualization of sense of place for the viewer, which they might follow up on by consulting more sources of information based on any personal resonance with the industrial and cultural heritage displayed.

Table 9. Synthesis of textural and structural descriptions of 5.2 Grytviken Olfactory		
Installations		
Textural descriptions		Structural qualities
Sense of smell	Memory and	Awareness of metacognitive function
Association	Contextual smell	embodiment
meaning intrinsic to memory and emotion	Olfactory representation	Cognitive and sensory functions
Spatially ordered	movement	Sense of place visualization
Focuses attention	Identifying odours	Interpenetrative nature of smell
Intimate sense and sensation	Emotional involvement	

Grytviken Olfactory Installations points out that the sense of smell seems intrinsically linked to memory and emotion. Associations of the smells presented in the context of the area defined earlier in 3.4 Grytviken Stopmotion Photowalk 1, are meant to present to the visitor a contextual smell that they would have already formed associations to in a different context. This process of re-contextualising occurs as we expand categories already linked to memory and meaning. The building or remain referred to in the olfactory representation is represented visually via a photograph of the site displayed behind the installations. Visitors walk between the five different shelves containing installations which are spatially ordered to correspond to the represented places. This movement—along with the olfactory sensory mode—focuses attention on embodiment in the installation. Smelling is conceptualized as an intimate sense and sensation, analogous in many ways to touch but with added emotional involvement due to the interpenetrative nature of smell. By participating in the installation visitors sample the odours and perform the accompanying cognitive and sensory functions involved in identifying odours and linking them to places (binding). The context of the exhibition promotes an awareness of metacognitive function, where the visitor is encouraged by the environment to consider how they visualize sense of place.

Table 10. Synthesis of textural and structural descriptions of Flensing Plan Mandala		
Textural descriptions		Structural qualities
Centre of the whaling operation	Flensing plan remains	Actual embodiment as part of the piece
chiming	Projected animation	Meditative reflection
Space opens up	Whale carcasses hauled ashore	Sensory and cognitive elements coming together, binding moments
Manufactured place in the gallery	Singing bowl	Metacognitive and sensory awareness
Inhabited by the viewer	One view fades to the next position	Understanding of the processes involved in experiencing place and in forming sense of place
Synthesis		

Flensing Plan Mandala is intended to be inhabited by the visitor to the exhibition incorporating the visitor's actual embodiment as part of the piece. At the centre of the projected animation is a space where the viewer can sit albeit on the floor—and a singing bowl is in this location as part of the installation. The soundtrack for the image sequence—balanced for the overall gallery sound field—contains the sound of a singing bowl. The chiming of the bowl is timed to occur as the image displayed in the projection fades to the next presented view. The visitor is welcome to ring the singing bowl with the provided mallet in time to the changing image—or however they please. The place represented is the remains of the flensing plan located at Grytviken. This site was chosen due to its importance as the centre or heart of the whaling operation, being the place where the whale carcasses were hauled ashore and portioned for processing in the various areas of the plant, which are located in an arc around the plan for winching the whale parts to their various destinations for industrial processing. The flensing plan is an area where space opens up in the station, room was needed as the whales could be quite large. The whalers would need room to work on the carcasses and haul them away, as new carcasses were brought ashore. For us this space creates a feeling of openness now—conducive to meditative reflection. Flensing Plan Mandala is meant as the centre of the exhibition, where all the sensory and cognitive elements experienced come together for a reflective and reflexive space for the visitor. By coming to a place manufactured in the gallery—where the visitor might be able to form or visualize a sense of place for the South Georgia whaling station remains—the intention is that understanding of the processes involved in experiencing place and in forming sense of place can be considered as well. This metacognitive and sensory awareness builds from an understanding of place and embodiment that the exhibition as a whole facilitates for the viewer to experience.

### 6.2.2 Structural themes

The structural themes identified below have been created from the preceding tables analysing textural and symbolic descriptions of the visualization work.

Table 11. Structural themes			
Exhibits (imaginative variations)	location		Themes
Photogrammetry Walks	3.2	Chapter 3	Representations of walks and visualization (formation of mental
Photosynth Walk	3.3		imagery). Delivery of spatial, visual,
Grytviken	3.4		audible, olfactory, kinaesthetic
Stopmotion			representations of the place and region.
Photowalk 1			
Stopmotion Walks,	3.5		
Grytviken			
Leith Slideshow	4.2	Chapter	Forms of narrative, and cognitive based
A Cinema in South	4.3	4	memory and knowledge. Presenting
Georgia			relics of place cognition as knowledge
Texts	4.4		
Grytviken	5.2	Chapter	Embodied sensing and metacognitive
Olfactory		5	visualization, toward awareness of
installations			binding moments
Flensing Plan	5.3		
Mandala			

As performative research, the variations are meant to primarily be experienced through the exhibition itself, as symbolic data, but are here described textually through the author's experience and interpretation of them.

Chapter Seven: Conclusion

### 7.1 Introduction

South Georgia and its history is unique in terms of the whaling history in the Antarctic and the associated station remains found on South Georgia. The promotion of the understanding of such a place to the rest of the world is warranted, the setting of the ruins in the awe-inspiring landscape of South Georgia and its environment is an experience to be appreciated. However, the environment of the island is relatively fragile, as many isolated island ecosystems are, and it has been negatively affected by travellers in the past. Beyond the unsustainable hunting of whales and fur seals, there have also been invasive plants and animals introduced to the island by travelling people. Rodents were particularly damaging to bird populations, and the introduced reindeer herds are also an example of this disruption to native flora and fauna. There are now introduced controls and procedures to mitigate any introduction of invasive species and their impact on the island. Nevertheless, the ability of South Georgia to take in large numbers of visitors is limited. Resources of the island are geared toward supporting day visitors from cruise ships and people traveling on their own yachts or ships, who bring their accommodation and supplies with them. Without a permanent resident population and infrastructure, the island will not be a typical tourist destination in the modern sense, nor would the stakeholders of South Georgia likely desire such an outcome. The remote location of the island also makes this unlikely. South Georgia is not really on the way to anywhere else, except arguably the Antarctic continent itself, likewise a remote destination.

Although tourism numbers have improved in recent years with more cruise ships calling—there is a limit on how many people can afford such a trip and on how many can call into South Georgia ports in each season. The expense of traveling via cruise ship to South Georgia also restricts the amount of people who can travel to the island. This cost also tends to eliminate diversity as far as income and socio-economic levels of the visitors to the island. Ironically in the past, lower paid workers and labourers in the form of whalers and tradesmen would have far outnumbered more elite levels of society on the island.

Considered as a general principle—given the unique remote setting of the island and its fragile and unique environment being partly what makes it distinctive—one could say the fewer visitors to South Georgia, the better, while maximising the opportunities for communicating understanding of its sense of place. Given that revenue in the form of actual tourism is an important source of funds for GSGSSI, it takes care to mitigate against any damages to the environment caused by tourism. There will also always be those who wish to travel to remote and unique environments for the first-person experience and can afford the journey—including those who save and budget for the journey of a lifetime. Likewise, the tourism and related industries operating in South Georgia employ staff who might otherwise not have had the opportunity to visit the island. For the rest of the world, there may be little opportunity to visit the island in actuality, but the aim of communicating its sense of place and unique history can still be accomplished to a degree.

This thesis contributes a sense of place visualization practice of an approach to gallery based installation, constructing visualizations with new media, traditional materials, and performance in a way that is embodied and sensory rich, this creates a place that acts as a surrogate to South Georgia through technological means—with sensitively to the ways in which we experience actual places. While it does not replace an actual visit to South Georgia as a primary way to form sense of place, it does provide a surrogate or virtual experience that offers some advantages in the minimal impact on the environment, cost per visitor, and in the format itself, which seeks to deepen understanding of the way sense of place is formed. The experience of the gallery installation is richer as well for those who have visited South Georgia in person and can then use the exhibition as a form of reactivation for their personal memories.

# 7.2 The contribution to knowledge In reference to the original research question:

What would constitute an appropriate form of visualization practice for the artist/researcher as a newcomer to the South Georgia history, to enable a wider public understanding of the historical context and cultural heritage of the whaling industry of South Georgia Island?

Following from the structural themes and the exhibition synthesis of textural and structural descriptions in Chapter 6, the primary research question above can be addressed by the art practice as research identified in this project which establishes three contributions of this practice that promote understanding of the historical context and cultural heritage of the whaling industry of South Georgia Island by:

- 1. Delivering spatial and sensory information through visualizations that promote empiricist understandings of time, locational information, spatiality, and sensory derived material characteristics involved in place.
- Delivering cognitive information through exhibits that function as narrative transmissions of cultural, constructivist connections, and cognitive related understandings of place.
- Promoting critical metacognitive understanding about individual sense
  of place formation and visualization through sensory linking and
  emphasis on embodiment, providing a space for reflexivity and
  reflection on binding moments of awareness.

Point 1 speaks to the establishment of a surrogate visualization of the South Georgia whaling station remains in the viewer's mind, through pre-reflective mental imagery formed by exposure to the various exhibits. Point 2 seeks to enrich this visualization by promoting cognitive associations of forms of memory, culture, and knowledge transmission resulting in a sense of place, albeit at the remove of the gallery exhibition, linked to South Georgia. The third point reflects a promotion of a deeper understanding of associated sensory memories held in the viewer as relational or regional to those in South Georgia and then, by calling attention to embodiment and the process of sense of place formation, enabling a better understanding of place and sense of place in general—promoting an appreciation and hopefully an interest in South Georgia specifically. Individuals already in possession of a sense of place of South Georgia, benefit from the exhibition as well, through new information and content, but also strengthening of their internal memories and the opportunity for reflection and reflexivity in sense of place metacognitive visualization.

A visualization practice that aims to increase metacognitive and sensory awareness involved in establishing sense of place, increases understanding of historical context and cultural heritage by broadening and connecting categories of region held by the viewer. With a secondary place attachment (a degree of sense of place established) the visitor may catch a spark or seed of interest, which can grow by the individual accessing readily available information on South Georgia whaling—consulting the various websites, books, and outlets of knowledge of the island's historical whaling industry. Once established in a person's being, a sense of a particular place does not fade easily, but waits to be brought into consciousness again—and interlinks with other place knowledge as acquired and extended.

## 7.3 Further contributions to knowledge

## 7.3.1 New adaptation of research methods

This thesis provides an articulation of a performative phenomenological reduction, accomplished through practice as detailed in Chapter 2.3 and implemented in Chapter 6.2. Although originally used in qualitative phenomenological study designs, the phenomenological reduction methods espoused by Moustakas (1994, p. 180–182) were adapted here to a performative, art practice based research study.

## 7.3.2 Articulations of visualization practice

In reference to the secondary research question identified for this thesis:

What new practices of visualization emerge from the attempts to answer the principle research question about visualising sense of place for the abandoned whaling stations of South Georgia?

#### 7.3.2.1 The turntable or rotational view

This project made use of the concept of the rotational view in many of the visualizations of sense of place. This effect, as variously applied, ranged in textural qualities of smooth motion, long range apparent motion, and selected view presentation. The use of rotational viewing of products in online shops is an analogous method of viewing a form from all sides, that has utility for sense of place, as well as archaeological and museum purposes. Showing all views of an object or location is an efficient and aesthetically revealing way to communicate these properties of shape, mass, and spatiality.

# 7.3.2.2 Multisensory presentation

Multisensory presentation of place representation allows for a deeper appreciation of sense of place as it incorporates more of the modes that we use to perceive the world. Although we are adept as human beings in performing a synaesthesia-like transposition between our different senses and meaning, expanding the sensory modalities used in sense of place visualization can bring added tools for expression and richness of experience promoting a fuller experience of sense of place within representations.

### 7.3.2.3 Embodiment in sense of place visualization

Incorporating embodiment into sense of place visualization alters the experience to the representation of sense of place, an incorporation of presence makes a difference to our perception and interpretation of these representations. In effect, these locations of representations of place in embodiment become another place to us that is connected in what could be said to be a region to the represented place. So that it is like, and unlike the original place in many ways. Embodiment within a representation, such as a museum or gallery exhibition and by extension virtual spaces achieved through presence, can become regionally associated places to the actual location.

# 7.3.2.4 Metacognitive approach and design

Incorporating a metacognitive aim to an approach to sense of place visualization allows for a greater level of understanding in sense of place formation for the individual. As this experience of forming attachment to place is personal and based on experience, it provides an avenue into understanding our embodiment in the world and relationships to both others and to physical locations that improves the quality of sense of place and therefore can positively impact the development of spirit of place.

#### 7.4 Limitations

A limitation to the gallery installation approach is that it itself becomes a restricted opportunity, it requires scheduling, maintenance, a place to be installed, and accessibility to the public. It also becomes a local experience to where the installation is occurring. This can be overcome with digital documentation or virtual exhibitions to a degree, but in general it is only recently with the more widespread use of virtual reality (VR) technology that it is feasible to create embodied digital experiences that can communicate a sense of place as effectively with presence as a gallery installation.

Another limitation of the current work is that it is focussed on the station remains in the present day (austral summer 2013–14), not recreating the past nor showing the present-day culture on South Georgia in an explicit way. This is a feature that could be layered into a further iteration of the work with the current visualization serving as starting point for an exploration of the past or for content on the current culture and issues of the island; however, this would be a different type of project—requiring methods suitable to reconstructions of the past and investigation into culture.

#### 7.5 Final words and future work

## 7.5.1 Performative phenomenology methods advancement

Following from the application of methods based on a performative interpretation of phenomenology in this project, a logical step will be to explore the incorporation of these methods in pedagogy of animation and games students, especially those studying at postgraduate level.

## 7.5.2 Industrial heritage sense of place visualization

The industrial age created many landscapes and sites that are transforming around us, the investigation of sense of place visualization has potential in a field that can still interrogate living memory as well as tangible remains through methods other than a traditional archaeology. Yet these remains can vanish quite quickly, providing an importance of future relevance to records of sense of place—if preserved beyond the loss of artefacts or sites. Research into what forms and characteristics of sense of place visualization might be valued by future archaeologists and historians would benefit this type of investigation and provide knowledge on extended, future impact.

### 7.5.3 Gallery installation as virtual reality previsualization

The gallery based installation can serve as a previsualization of a virtual reality environment. This thesis outcome models a way to work with sense of place visualization that can serve as inspiration for a virtual reality version for aspects of the exhibition—modified for the special requirements and experience of VR. Creating a VR representation of South Georgia without having first done a traditional gallery based installation, would not necessarily have led to the same sorts of understanding about sense of place visualization. These understandings could now provide the basis of an approach for implementation in VR to potentially reach a wider audience than a local gallery installation.

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# **Appendix**

Grytviken Whaling Station: An Introduction for Visitors by Nigel Bonner Scanned 11/04/2018



### GRYTVIKEN WHALING STATION AN INTRODUCTION FOR VISITORS

by Nigel Bonner

Welcome to the South Georgia Whaling Museum. This leaflet is intended to help you find your way about Grytviken whaling station, the first whaling station to be established in the Antarctic and the fore-runner of the huge Antarctic whaling industry. This station, which had crew accommodation for 300 men, was designed to produce whale oil, sperm oil, seal oil, whale meat meal, whale bone meal, meat extract and, in its final years, frozen whale meat. It could process about 25 fin whales, each 60 feet long, in 24 hours.

Start at the **FLENSING PLAN**. This is the large open space between the two main jetties of the station. At the foot of the plan, on the right as you look from the sea (all directions are given in this way so as to correspond with the map in the centre of this leaflet and on the sign outside the Museum) is the **whale slip**. Whales brought in by the catcher boats were collected by one of the station motor boats and moored at the foot of the slip. On a signal from the head flenser, one of the whales would be manoeuvred to the slip and a wire strop passed round the small of its tail, just in front of the flukes. A stout wire was then heaved down from the **WHALE WINCH** at the head of the plan. (The 45-ton electric whale winch has been removed from the station. Its mountings were in the ruined shed at the head of the pian). The whale was then hauled up the plan, which was kept slippery with water and oil from previous whales. Steam winches on either side ripped off sheets of blubber freed by the hockey-stick shaped flensing knives of the flensers. (See these in the Museum).

Walk up the plan from the slip, passing the huge rope-wrapped chains that lie there. These were used for securing the whales to the catcher boats to tow them back to the station. The large building on your right is the **BLUBBER COOKERY**. Sheets of blubber were drawn up to the blubber plan and cut into strips which were then heaved up by a wire passing over a block suspended from a girder projecting from the side of the building. These strips were then fed into a **Strømmen cutter**. Enter the door to the right of the small pit into which the strips were fed. On your left is the cutter. It consisted of a large steel wheel fitted with

knives which minced the blubber into small slices. These fell into a bucket conveyer and were carried to the top of the factory.

Notice the twelve huge **press cookers**. These were pressure vessels in which the minced blubber was boiled by blowing in steam until the oil separated. Climb the ladder, if you wish, and see the ingenious system of screw-conveyors that allowed the blubber to be loaded into any one of the cookers. Each cooker would hold about 24 tonnes of blubber which would be cooked for approximately 5 hours at 60 lbs/in² of steam pressure. After this the oil could be blown off to the **SEPARATOR HOUSE** for "polishing", a final purification by centrifuging. The remaining contents of the cooker, *graks*, consisting of the solid fragments of the blubber, soluble proteins and some oil, were also sent to the separator house.

Leave the blubber cookery and walk to the head of the plan. The ruined building behind the whale winch is the **SEPARATOR HOUSE**. This, and the **POWER HOUSE** behind it, were destroyed by fire after the station closed. However, you can still see separators of several different types used for recovering oil from the graks and finally purifying it before it was sent for storage in the **WHALE OIL TANKS** at the right of the station. With a good supply of whales, the station could produce 1000 barrrels (six barrels to the tonne) of oil a day.

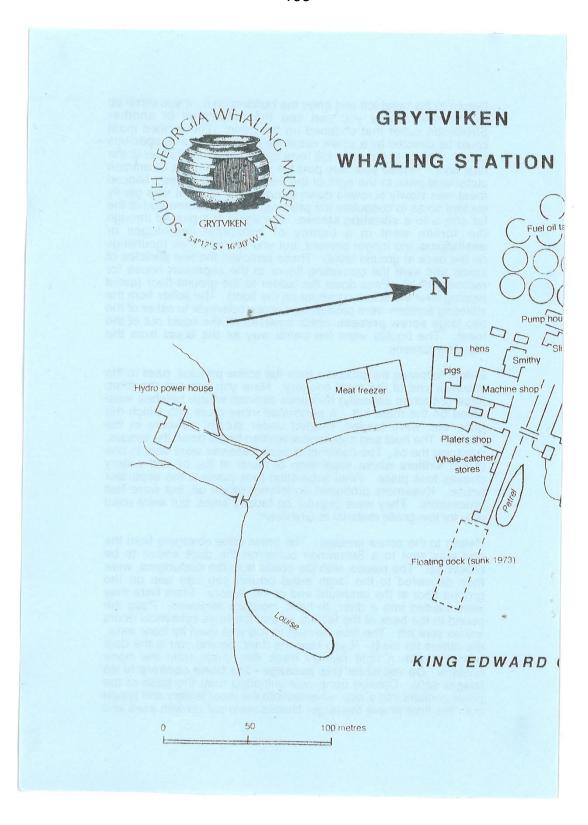
Go back to the plan and climb the ladder by the side of the steel slip that leads up to the loft of the **MEAT COOKERY**. When the whale had been flensed the meat and guts were drawn up this slip. Guts, tongues, belly blubber, and flippers and ribs were cooked out in special rotating **kvaerner cookers**. The circular hatches giving access to these three Kvaerners (two hatches each) and the steam saws used for cutting up the flippers and ribs, can be seen on the seaward end of the meat loft. Walk across the loft to the back of the building on the loft. This is where the huge fillets of meat from the whales were cut up. (Note the wooden decking to protect the blades of the knives). The chunks of meat were loaded into a bucket conveyor.

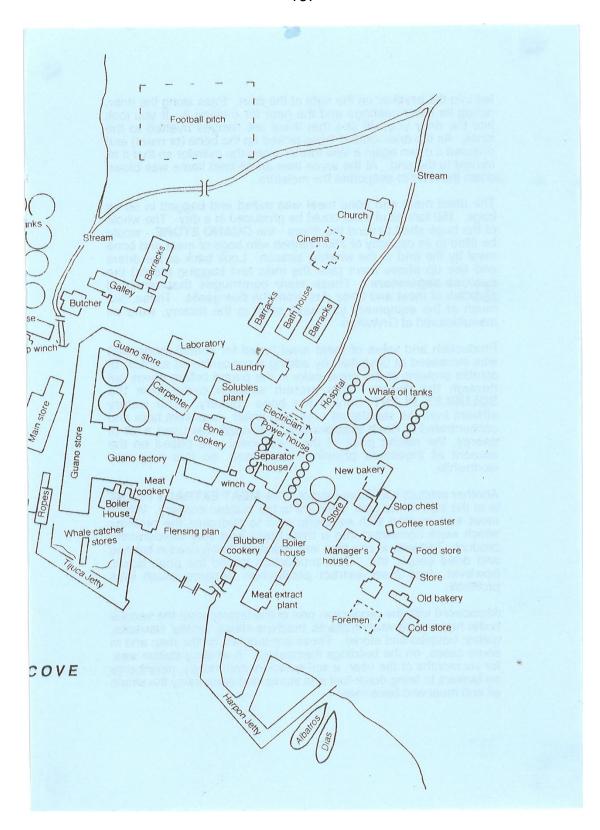
Before you enter the MEAT COOKERY, walk round towards the BONE COOKERY. WARNING - do not move onto the bone loft - the deck is no longer safe. Note the bone saw, one of the original four on the loft. The heads and backbones were drawn up the two ramps you can see at the head of the plan. On the loft they were sawn up into chunks small enough to be dropped through the hatches in the deck. These are the tops of the 33 bone press cookers and one Kvaerner cooker. Bone took longer to cook than blubber, but as much as a third of the oil in a whale might be contained in the bones.

Return to the meat loft and enter the building on it. If you climb up to the next storey you can see the mountings of another Strømmen cutter that chopped up the meat. The minced meat could be directed by a screw conveyor to any of the five openings below. Return to the meat loft level and go down the ladder to the next floor. Thread your way past the cutter disc from a Strømmen cutter and pass to the right of the five **treatment tubes**. Minced meat was slowly screwed down these tubes where it was gently cooked so as to coagulate the proteins. The meat emerged at the far end onto a **vibrating screen**. The liquid that passed through the screen went to a battery of horizontal centrifuges or **desludgers** (no longer present, but you can see their mountings on the deck at ground level). These removed the fine particles of solids and sent the remaining liquor to the separator house for recovery of oil. Pass down the ladder to the ground floor (avoid tripping over the screw conveyor on the floor). The solids from the vibrating screens were passed by a screw conveyor to either of the two large **screw presses** which sqeezed all the liquid out of the meat. The liquids went the same way as the liquid from the vibrating screens.

Before following the products from the screw presses, pass to the seaward end of the meat cookery. Here you can see the three large (24-tonne capacity) Kvaerner cookers whose hatches were noted on the meat loft. A perforated inner drum into which the guts, etc. were loaded, rotated under steam pressure in the cooker. The heat and mechanical attrition broke down the tissues, releasing the oil. The contents of each Kvaerner were sent to one of the **skillers** where separation of much of the oil and watery phases took place. Final separation took place in the separator house. Kvaerners produced an inferior grade oil, but were fast processors. They were popular on factory ships, but were used only for low-grade material at Grytviken.

Return to the screw presses. The press cake emerging from the end was sent to a Strømmen cutter on the deck above to be broken up. The pieces, with the solids from the desludgers, were then delivered to the large **meat pound** you can see on the ground floor at the landward end of the factory. From here they were loaded into a drier, to have moisture removed. Pass the pound to the back of the factory so that the huge cylindrical driers are on your left. The drier nearest to you was used for bone meal, the others for meat. If you face the drier, behind you is the dark passage with a light railway track that leads from the bone cookers. **Do not enter this passage - the bone cookery is no longer safe.** Cooked bone was unloaded from the base of the press cookers into a skip, wheeled into the meat factory and tipped onto the floor where the larger chunks were cut up with axes and





fed into the **breaker** on the right of the drier. Pass along the drier, noting its roller bearings and the gear for rotating it. If you look into the drier you will see that there are flanges rivetted to the sides. As the drier rotated these picked up the bone (or meat) and dropped it down again a little further along the cylinder so that it all moved to the end. At the same time an oil-fired flame was blown down the drier to evaporate the moisture.

The dried meat and bone meal was milled and bagged in 50 kg bags. 150 tonnes of meal could be produced in a day. The whole of the huge shed beyond the driers - the **GUANO STORE** - would be filled to its capacity of 7500 tonnes with bags of meat and bone meal by the end of the whaling season. Look back at the driers and see up above them (and the mills and bagging plants) the **cyclone separators**. These were centrifuges that removed particles of meat and bone dust from the flue gases. These, like much of the equipment you have seen in the factory, were all manufactured at Grytviken.

Production and value of meat meal (used for animal foodstuffs) was increased at Grytviken by adding a concentrated solution of soluble proteins to the press cake in the pound before it was put through the driers. This protein solution came from the **SOLUBLES PLANT**, behind the bone cookery. The watery effluent from the separators - the glue water - was sent here and concentrated in **flash evaporators**. Although this used a lot of energy, the selling price of the meat meal was based on the amount of digestible protein it contained, so this was well worthwhile.

Another product was meat extract. The **MEAT EXTRACT PLANT** is at the side of the plan, adjacent to the blubber cookery. Whale meat was treated with sulphuric acid to hydrolise the proteins which were converted into a thick black and very flavoursome product. This was at one time very valuable, being used in canned and dried soups, etc. Over-production forced the price down, however, and meat extract production became much less profitable.

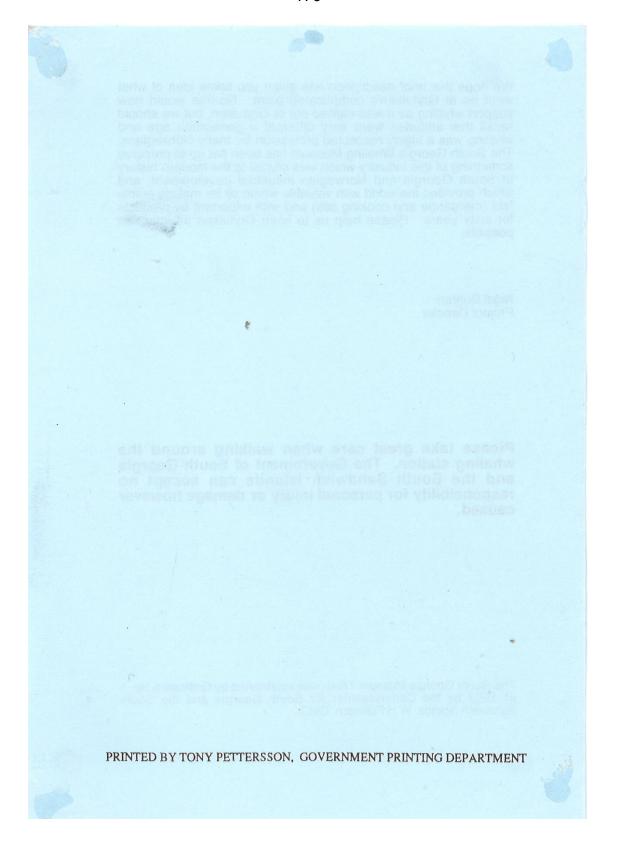
Associated with the production part of the factory were the various boiler houses, generating plants, machine shops, smithy, barracks, galley, hospital and stores. These are labelled on the map and in some cases, on the buildings themselves. A whaling station was, for six months of the year, a self-sufficient community, reliant only on tankers to bring down fuel and stores and carry away the whale oil and meat and bone meal.

We hope this brief description has given you some idea of what went on at Grytviken's complicated plant. No-one would now support whaling as it was carried out at Grytviken, but we should recall that attitudes were very different a generation ago and whaling was a highly respected profession for many Norwegians. The South Georgia Whaling Museum has been set up to preserve something of this industry which was crucial to the modern history of South Georgia and Norwegian industrial development, and which provided the world with valuable whale oil for making edible fats (margarine and cooking oils) and with important by-products for sixty years. Please help us to keep Grytviken as intact as possible.

Nigel Bonner Project Director

Please take great care when walking around the whaling station. The Government of South Georgia and the South Sandwich Islands can accept no responsibility for personal injury or damage however caused.

The South Georgia Museum Trust, was established by Ordinance No. 1 of 1992 by the Commissioner for South Georgia and the South Sandwich Islands, W H Fullerton, CMG.



Plates

Grytviken Austral summer 2013–2014



Managers Villa/South Georgia Museum



Foremen's Barracks/Drukken Villa/Little Villa Museum staff accommodation



Old Bakery (remains)



Foremen's Barracks (remains)



Cold Store (remains)



Potato Store



Provisions Store No. 3



Coffee Roasting House



Slop Chest



Provisions Store No. 2 (remains)



Post Office



Tanks



Tanks



Ski-jump (remains)



Church



Shed



Cinema (remains)



Football Field



Bath House (remains)



Hospital (remains)



Barracks (remains)



Barracks (remains)



Russebrakka/Barracks and Laundry (remains)



Tank



Tanks and Valves



Separator and Power Plant (remains)



Glue Water Plant/Solubles Plant (remains)



Store and Laboratory



New Barracks



New Barracks Mess (remains)



Mess (remains)



Slaughterhouse/Butcher (remains)



Tanks



Pump House (remains)



Winch House (remains)



Meat Freezer (remains)



Engineering Workshop, Smithy, and Foundry (partial remains)



Jetty (remains) and Plating Shop (remains)



Remains off jetty



Catcher Rope Store (remains)



Main Store



Meat Plant (remains)



Meat Loft (remains)



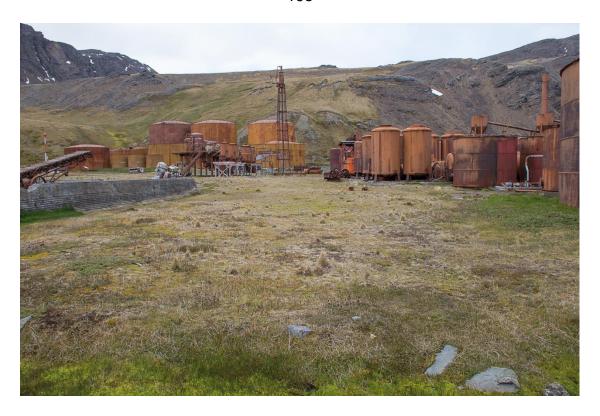
Plant (remains)



Motorboat



Bone Cookery (remains)



Guano Store (remains)



Blubber Cookery and Boiler House (remains)



Tijuca Jetty



Harpoon Jetty (remains)