# 'KNOWING' THE SOUTH SHETLAND ISLANDS

## The Role of Sealers' Charts

[Received December 12th 2018; accepted October 4th 2019 - DOI: 10.21463/shima.14.1.09]

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ABSTRACT: 'Discovery' and 'knowing' are two separate processes. Charting of new coasts has been characterised as a colonising action, expressing a power relationship underpinned by discovery, but in the case of the sealers in the South Shetlands it was as much the necessity to know the islands in order to survive as it was an act of 'owning' the new land. The South Shetland Islands, located 100 km off the Antarctic Peninsula and 900 km south of Cape Horn, were discovered by Western mariners in 1819. Over the next three years, charts and sailing directions for the islands were created by a Royal Navy surveyor, and by sealers from Britain and the USA. This article looks at the resulting products, and analyses the complex process of knowing new and challenging territory, the underlying influences that can be read into the charts and journals, and in the naming of places in the new territory. It also reflects on the complex and sometimes contradictory forces that distinguish the naval, British sealer and American sealer ways of seeking to understand the South Shetlands.

**KEYWORDS:** charts, exploration, South Shetland Islands, Antarctica, imperialism, toponomy, sealing

#### Introduction

The South Shetland Islands, close to the Antarctic coast (Figures 1 and 2), were discovered in 1819 and immediately became the focus for fur sealing. Apart from an initial and very rudimentary naval survey, all of the early exploration and charting of the archipelago was undertaken by sealers from Britain and the USA. A number of key findings arise from the study of how the islands began to be understood: that it is possible to discern aspects of how sealers learned about the new and unknown territory; that while 'big picture' motives – such as imperialism, capitalism and Enlightenment science – can be read into the records left by the sealers, there were more local needs for navigational safety and resource location that also prioritised the creation of geographical and hydrological knowledge; and that British and American sealers had very different views about exploration and the recording of what they found.

The South Shetlands Islands were entirely new territory, further south than had ever been occupied before. Sealing there appears to have been the first intensive human interaction with the Antarctic, in a region of rough seas and frigid weather, a multitude of islands, straits and reefs with the continent of Antarctica somewhere behind it, fog-bound much of the time, and totally uncharted. Unfolding the new territory was made even more complicated by the fact that it was only accessible for about three months of the year (the winter off-seasons were often spent in the slightly milder Falkland Islands, over a thousand kilometres to the north). How did the first mariners approach such a challenging

environment, and what evidence do we have for their efforts? Our sources are the logs, sea journals, charts, and



Figure 1 – Map of the location of the South Shetland Islands (marked with pin) with regard to South America and Antarctica (Google Maps, 2019).

published works of the time. The first sealing era extended just three years from 1819 to 1822, and the main navigators of the islands were British and American sealers, with only one small British naval expedition and a fleeting visit by a Russian explorer in this first period. The descriptions in the journals, the nature of the charts made, and the names applied to places, enable us to investigate the motives that influenced their creation and to see how knowledge of an unknown territory was built and disseminated.

The study of the exploration of the world and the exploitation of its resources in the 18th and 19th centuries has given rise to many explanations of how and why this massive expansion of the West happened. One argument is that the driver was national rivalry and the rise of imperial and colonial aspirations among European nations. A related idea is that discovery and exploration should be seen as part of the expansion of the strategies of capitalism in the 19th Century, in which sealing and the closely related whaling had become global industries (Zarankin and Senatore, 2005). Another motivation was the influence of the Enlightenment, and the growth of scientific curiosity about the world, its

geography and its natural resources (which itself had a nationalistic/imperialistic competitive edge). These overarching motivations might help explain the reasons for sending sealers to the South Shetlands in the first place, but they do not help us much in understanding how the new territory of the islands was approached on the ground: how individual sealers made decisions about what to explore and how to document that activity, and how its intricacies came to be incorporated into the global geographical knowledge base. This is where the logs, journals, charts, and published works become critical evidence.

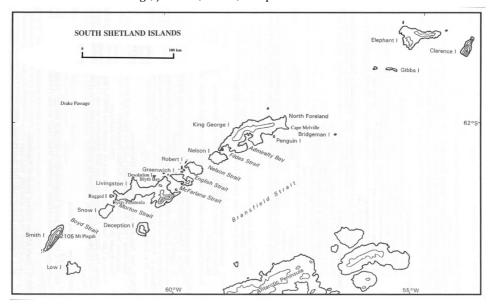


Figure 2 – Map of the South Shetland Islands (horizontally across centre of image) and the northern tip of the Antarctic peninsula (lower centre right).

As will be seen below, one of the earliest rough charts of the South Shetlands (that of Bransfield) illustrates the desire of the British Royal Navy to locate, name and to absorb the islands into the growing British Empire. The British Royal Navy was the official tool of a nation with a growing dominance over world industrial production, a large national market for natural resources to feed that industrial and manufacturing base, and an imperialistic interest in extending its geographic and economic dominance of that market. The sealers had more mixed motivations. The primary one, obviously, was to profit from the taking of seal skins but other influences, social and cultural, were also at play. British sealers in particular shared close affinities with the Royal Navy, the objectives of scientific and geographic discovery stimulated by the Enlightenment, and the imperialistic mind-set of the nation; and this is reflected in their charts. The American sealers were motivated more by the potential for economic gain, and showed little interest in wider political or geographic issues: they were there to gather seal skins, not to advance geographical knowledge, to make charts, or to extend US international interests.

Both the British and the American sealers, however, shared the desire and indeed the necessity to learn the basic geographical and hydrological details of the archipelago. It is argued here that the pragmatic purpose for sealers in creating charts, naming places, and exchanging this information among themselves was the desire to understand the

geography of the islands they had to navigate, and to identify landmarks that helped them find safe harbours and sealing beaches: ie to 'know' the South Shetlands in order to exploit them safely. For in a freezing region of frequent fogs, floating ice, scattered reefs, islands and howling gales, such knowledge was fundamental for both survival and profit.

The idea of the sharing of information about the geography of the islands between sealers appears at first glance to run counter to the widely-held belief that sealers were particularly secretive about the sources of seals, so as to protect their own 'patch' from other sealers. As is shown below, however, the desire for secrecy fluctuated over time, and there was a concurrent common desire to share information about navigational safety. There is little evidence of the suppression of knowledge within the charts, of what Harley has referred to as "silences which arise from deliberate policies of secrecy and censorship" (1988a: 57; see also Thatcher, 2018): sealing beaches are not erased, nor are safe anchorages.

The ways in which maps have been analysed and interpreted has changed over time, and differed between disciplines. The process of making maps - ie cartography - has been the focus of much consideration over the last three decades (eg Robinson et al, 1977; Crampton, 2001: 237-238), with the rise of critical cartography engaging with the perception that maps are expressions of power. Harley urged those analysing maps to see them as texts and to "search for the social forces that have structured cartography and to locate the presence of power - and its effects - in all map knowledge" (1989: 2; also 1988a: 57; 1988b). As will be seen, to some extent this exhortation is relevant to the interpretation of British sealer charts in particular. This understanding of cartography stimulated interpretations of maps revealing, for example, early modern nation building and colonialism, where power relations can be clearly read in the cartography (eg Craib, 2000; Harley, 1988b). While these perspectives, largely argued at the level of theory (Perkins, 2004: 381), are challenging and intriguing, more recent scholarship has broadened the approach to suggest that maps are not just texts but are also a set of performative practices that change over time: they are conscious actions with underlying purposes and motives, not simply impassive descriptions of geographical 'truth' (Rose-Redwood, 2015: 4; Harley, 2001: 107). Edney (2015: 12) has made the timely observation that map making is not a uniform universal endeavour but an historical process of specific practices - ie the 'map' is not a product of a single aim or derived from axiomatic principles, but is rather the result of complex and contradictory historical and creative forces. This insight resonates in the analysis of the South Shetland charts and journals. Others have begun to address charts and the presentation of geographical knowledge from an archaeological perspective, proposing an approach that brings in the experiential aspect of interaction with new lands to expand an understanding of human reactions as a counterpoint to the scientific positivism of traditional cartography (Salerno et al, 2010; Salerno and Zarankin, 2014).

## The context for the discovery and charting of the South Shetland Islands

Seals had been hunted for their skins and oil in the North Atlantic and Arctic seas since the 16th Century and by the end of the 18th Century sealing had become a global industry (see Busch, 1985). Sealing produced two products, the fine pelt of the fur seal and oil from the elephant seal. Fur seal and land animal fur was a valuable commodity in China, where it was used to line clothing, especially the neck and cuffs of jackets, and to make hats. After a method of treating the fur was discovered in London in 1795 (Chapman, 1818), the use of seal fur was opened up to the British clothing industry as well. The skins were also tanned to produce shoes, gloves, and book bindings but were primarily valued for the lustrous felt

the fur produced (Burton, 2018). Elephant seal oil was of a quality between that of Baleen whale oil and Sperm whale oil, and was sometimes mixed with whale oil during combined whaling/sealing voyages. The oil was used for a wide range of purposes, including lubrication as machine oil, lamp oil, soap, and for finishing leather and softening wool in the clothing industry.

European and American knowledge of seal populations in the southern hemisphere and the Pacific was largely provided by the 18th Century voyages of exploration. As the sealing industry expanded, the sealers gathered information about the location of seal colonies from whatever sources they could: dockside gossip, family or commercial connections, the journals of explorers, and exploratory voyages of their own (Pearson, 2016). Sealing progressively exploited the coastal seal rookeries of south-west Africa (being sealed by 1610) and Patagonia in South America (from the 1770s) but the seal numbers there were dwarfed by those found on the temperate and sub-Antarctic islands discovered in the South Atlantic, Indian, Pacific and Southern Oceans. The focus of sealing progressed sequentially from the Falkland Islands to South Georgia, Kerguelen, the Crozets and Prince Edward Islands, Juan Fernandez, southern Australia, New Zealand, and the nearby sub-Antarctic islands, before the discovery of seals in the South Shetlands made them the last major fur sealing grounds to be exploited (Kirker, 1970; Busch, 1985).

## The discovery and exploitation of the South Shetland Islands

The first human land-based interaction with Antarctica was triggered by the sighting of the South Shetland Islands by William Smith on 19th February 1819, while on a passage from Buenos Aires to Valparaiso in the brig Williams. Failing to convince Captain Shirreff, the Royal Navy's resident senior officer in Valparaiso, of his discovery (a necessity if Smith was to later claim a reward for it), Smith again headed south in June but was unable to reach the islands due to heavy ice conditions. He tried again in October and this time he sent a boat ashore to claim the land for King George III. He then followed the shoreline of what later proved to be an archipelago that extended over 500 kilometres on a north-east/southwest axis. This time Captain Shirreff was convinced, and hired the Williams to follow up the discovery, placing Edward Bransfield, Master of HMS Andromache, aboard under orders to carry out an exploratory voyage (Campbell, 2000: 40-41, 69-70; Jones, 1985). The islands were observed to have large numbers of fur seals on those beaches that were free of ice. News of Smith's discovery was soon the subject of speculation in the ports of Valparaiso and Buenos Aires, and quickly reached New England and British ports. Even before Smith's discovery was officially confirmed by Bransfield, sealing captains based in Buenos Aires were in search of the new islands, quickly followed by those from Britain and the United States.

It is generally accepted that three ships visited the South Shetland Islands and took seals in the 1819-1820 summer. They were the San Juan Nepomuceno and the Espirito Santo out of Buenos Aires, and the Hersilia from Stonington, Connecticut; and their crews were the first humans to operate on land in the Antarctic for any length of time (Pearson and Stehberg, 2006). The initial sealing rush to the South Shetlands was dramatic and devastating for the seal population. There were about 120 vessel visits to the islands in the 1820-21 and 1821-22 seasons, and a minimum of 300,000 seal skins were taken. By 1823, however, the seal numbers had been so diminished that the South Shetlands were no longer profitable.

The South Shetlands were entirely new territory for the sealers, and discovering the complexity of the archipelago with its six larger islands and many dozen smaller isles and rocks, establishing the location of sealing beaches interspersed with glacier snouts, and recording major navigation hazards, especially along the exposed northern coast and in the rapidly-flowing straits between the islands, had to be done by the sealers themselves. While they had experience of the harsh sub-Antarctic islands such as South Georgia and Kerguelen, this was their first encounter with the Antarctic itself, and initially it was unclear where the islands ended and the icy edge of the continent began; indeed, at the start it was only assumed that the continent was there. One of the purposes of naming and charting landmarks was to establish route markers in this maze of islands and hazards.

## The charts and journals

In the three years after the South Shetland Islands were discovered in 1819, six charts are known to have been made. These are supported by the logs and journals of their creators in some instances, enabling us to see the context of their creation. All of the charts were drawn by British seamen, five by sealers and one by a naval officer. It is noteworthy that no single chart of the islands appears to have been made by an American sealer, and only two charts of small harbours have been tentatively attributed to American Nathaniel Palmer. The charts are discussed here in chronological order.

## a) William Smith's chart (1819-20)

The chart most associated with Smith's initial contacts with the South Shetlands on the brig Williams in February and October 1819, that published by his colleague John Miers the following year, names just seven places (Miers, 1820) (Figure 3). Only one of these names is descriptive, in that it refers to a British landmark, 'North Foreland', the chalk headland in Kent of the same name (Campbell, 2000: 46). The other names memorialise Smith, the crew or his brig, the senior Royal Navy officer at Valparaiso, the national hero Admiral Lord Nelson, and, presumably, Lloyd's insurance company of London ('Lloyd's Land' - possibly what is currently known as Greenwich Island). These named features mark points along the north-western side of the South Shetland archipelago, along which Smith sailed. Smith's sketch chart depicts eight islands, as well as two points mistakenly thought to be part of the 'Main Land' (Smith's Cape and William's Point), having presumably assumed that the high peaks on each (2100 and 1650 metres respectively) were continental. His charted islands and the channels between them were largely based on assumptions and bear little resemblance to the landforms on the modern chart, though his tentative charting of a strait between the islands and the presumed mainland beyond suggests he saw open water through at least one of the straits separating the islands. The chart reflects the problems in defining the new territory, with local fogs veiling the distinction between island and sea, long distances sailing along rugged coasts that could not be closely approached, and an uncertain location of a continent suspected to be close by.

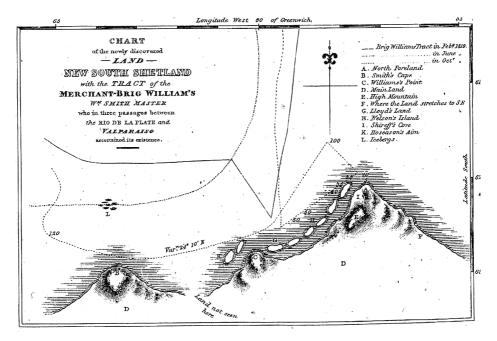


Figure 3 – Mier's map of Smith's discoveries, showing Smith's track along the northern side of the archipelago, and his crude mapping of the islands. (Miers, 1820).

### b) Edward Bransfield's chart (1820)

The chart created by Edward Bransfield, Master of HMS Andromache and surveyor aboard the Williams in December 1819, is more detailed than Smith's chart and includes both the northern and southern sides of the archipelago, the latter as seen from Bransfield Strait (Bransfield, 1822) (Figure 4). Bransfield's chart, however, is still a very limited depiction of the archipelago, as the voyage was hindered by persistent foggy weather that both restricted visibility and precluded the closer exploration of inlets and channels (Campbell, 2000: 73). The western extremity of the chart is Smith's Cape, shown again (incorrectly) as part of a much larger land mass (it is really part of Smith Island). The chart starts again at Start Point, on Livingston Island. West of that point the chart names New Plymouth, an anchorage used by sealers from the 1819-20 season onwards. When Bransfield was at anchor east of Start Point, in what is now named Barclay Bay, the British Santiago-based sealing brig Espirito Santo was at anchor in Bransfield's New Plymouth, the two ships being about 8 km apart and each unaware of the other's presence (Campbell, 2000: 104-5 fn5). The American sealer Hersilia arrived at the same bay on 23rd January 1820, and the American name for New Plymouth, President's Harbour, probably arises from that visit. At this earliest point in time Britain and the USA were making the islands familiar by applying important national names. Bransfield moved eastward, naming Sheriff's Cape (now Cape Shirreff) adjacent to Smith's Shireff Cove, and Desolation Island, both important sealing sites in the following year; and both names are still being used.

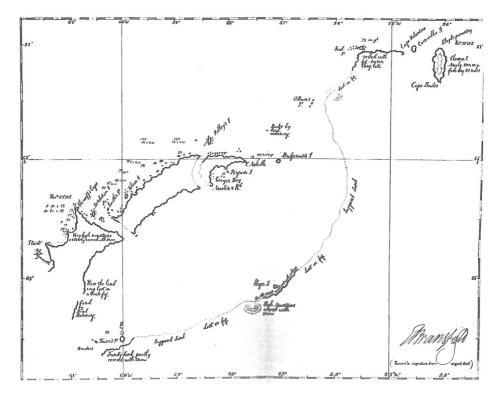


Figure 4 – Copy of Bransfield's chart (1820). The islands are combined into two large masses, and points on the Antarctic Peninsula are indicated, but the dotted coast labelled "Supposed Land" linking the Peninsula with Elephant Island does not exist. (Gould, 1941).

As Bransfield sailed north-eastward, the poor visibility drove him offshore, so the chart misses most of the details of the archipelago – a problem associated with the definition of new territory, where there was no 'base map' and the risks associated with poor visibility were amplified by lack of knowledge. Three major straits are missed entirely, and four major islands are combined into one large un-named island. The distant observations and poor visibility are reflected in the fact that only six places are named in 200 km of coastline. Bransfield then turned into Bransfield Strait between the South Shetlands and Antarctica, but again poor visibility meant that only four places were named on the southern coasts of the archipelago, and nothing at all south of Martin's Head on King George Island. Dotted lines connecting the location of the unnamed Admiralty Bay, to the north coast of King George Island near Ridley Island, indicate that Bransfield mistook the wide opening of Admiralty Bay for a strait, but dared not get close enough to investigate.

Bransfield landed at what is now known as Turret Point, inshore of Penguin Island, and on the 22nd January 1820 claimed British sovereignty by planting a flag and burying a bottle with coins in it (Campbell, 2000: 112-113). Sovereignty claims were part of the 'performance' of the Royal Navy (and were emulated by some sealers), which involved the stamping of the new place as now being 'owned' by Britain, a part of the global British Empire. Few of these claims of sovereignty were ever subsequently ratified by the British government, though a number were revived in the 20th Century as evidence of British priority of discovery when laying claim to Antarctic territory.

On 29th January 1820 Bransfield sighted the Antarctic Peninsula (referred to as Trinity Land), now Trinity Peninsula) from Bransfield Strait. The Russian explorer Fabian von Bellinghausen had pre-empted Bransfield as the 'discoverer' of Antarctica by being the first human to sight the Antarctic ice cap, some 1200 km to the east, just two days earlier. Bransfield sailed north-east parallel to the Antarctic coast as far as Hope Island, but again the chart shows no detail of the coastline. From there he sailed to the north-east, where he discovered and named the volcanic Bridgeman Island and O'Brien's Islands as well as Elephant Island (which Bransfield did not name). He also named Seal Rocks, to the north of Elephant Island, after Smith had landed there on 13th February 1820, and gathered eight "very fine" fur seal skins:

On a fine but very limited sandy beach Mr Smith effected a landing and this he reported to be so completely covered with seals as to render it dangerous to go among them – he described them as regularly stowed in bulk and sallying among them made such havoc that he left upwards of three hundred carcases not being able to stow them in the boat. (Campbell, 2000: 145)

Of the twenty two places newly named by Bransfield, thirteen were named after people – admirals, captains, members of the Royal family and others (what might be called 'patronage names') – seven for their appearance, qualities, or similarity to British places – one for aspiration – Hope Island (for the hope it would lead the way towards Southern Thule, being the South Sandwich Islands sighted by Cook in 1775) – and one for the date (Valentines Head). An interpretation of the use of names is offered in the analysis below.

#### c) Richard Sherratt's chart (1821)

The earliest known chart made by a sealer (after Smith) was drawn by Richard Sherratt in 1821 (Figure 5). Sherratt was master of the *Lady Trowbridge*, wrecked off Cape Melville on 25th December 1820, and he made his sketch chart as he waited for the return home on another sealing vessel. Although Gould has described the chart as "somewhat grotesque" (1941: 227), and cartianly it is not very exact in its depiction of the islands (most of which are un-named and several of which are combined into single islands), the chart does have some interesting features indicating its intended use by sealers. Place names are limited and include many from Smith or Bransfield's surveys, indicating that these had become available to sealers very soon after their creation.

The strait between an un-named Livingston Island and a combined and un-named Snow and Smith Island is labelled "STRAITS too dangerous for large vessels", which is what later sealers also said of what was later named Morton Strait – Powell calls it "Hell's Gate" and Fildes calls it "Straights (sic) of Despair". Similarly, the chart labels the southern shore of Yankee Strait (now McFarlane Strait) "Very Dangerous", and Perrys Strait (now Nelson Strait) as "Good Passage" (it is now the principal navigation passage from Bransfield Strait to the Drake Passage). The very narrow Fildes Strait between Nelson Island and King George island is labelled "Hurl gate for boats", "hurl" perhaps suggesting the fast flow of the tide or meaning "hell gate", the two being, for example, alternate spellings of Hell Gate on the East River in New York. Anchorages are shown with anchors, though the use of this primitive chart to find them would be madness. The named anchorages, all used and referred to by other sealers and still bearing these names, include Clothier Harbour, Harmony Cove, Potter Cove, Esther Harbour, Bay of Destruction (where Sherratt's ship was lost), and what appear to be the un-named Yankee Harbour and Johnson's Dock, as well as

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two unidentified anchorages on the combined Snow/Smith Island. The chart also shows rocks and reefs at critical navigation points.

Figure 5 - Sherratt's chart (1821 - simple but full of information useful to sealers). (Headland 2018: 142)

Several other notes on the chart are directed to assist sealers: Round Isle is labelled as "mark for Esther Harbour"; Fildes Peninsula is labelled "Table Land" for its seaward appearance; Post Office Rock is identified south of Nelson Island, probably being what is now known as Lone Rock or Grace Rock, and where messages might be left; Table Island is named together with Clothier Harbour, indicating it as the lead island to the anchorage; the area of rocks east of Sheriff's Cape is labelled as having an "abundance of seal here", and what is clearly Smith Island is labelled "Land very mountainous". Soundings are provided in several key approaches. Finally, an interesting note is provided near Esther Harbour: "11 men left here", which refers to crew from the British sealing vessel *Lord Melville* who intentionally over-wintered there in 1821, the first human wintering in Antarctica (Headland, 2018)

So, while the Sherratt chart is admittedly crude, its purpose is clear – it was intended to assist sealers in navigating the South Shetlands, finding sealing sites and harbours, and avoiding navigational hazards. The only sign of nationalistic intent is the depiction of the Union Jack in Georges Bay at the site of Bransfield's territorial claim. The Sherratt chart, in showing sealing locations, shows a marked lack of secrecy – a characteristic shared with Robert Fildes' charts, probably for the same reason, namely that both men had lost their ships and had no stake in protecting sealing ground information.

## d) Robert Fildes' journal and charts (1821-22)

Chronologically, the next set of charts are those contained in the sailing directions written by Captain Robert Fildes in 1821-22. Fildes' brig, the Cora of Liverpool, arrived in the South Shetlands on 14th December 1820, and was wrecked during a gale at Cora Harbour, Desolation Island, on 6th January 1821. Fildes subsequently travelled with other sealing vessels around the archipelago until the end of the season, when he sailed back to Britain in the Indian. He returned in the summer of 1821-22 in the brig Robert but his ship was again wrecked, holed by drifting ice at Clothier Harbour on 7th March 1822. Fildes wrote sailing directions with some accompanying local charts for the main sealing harbours and straits during his time in the South Shetlands and these, together with his journal entries, form an invaluable historical resource. Fildes' journals and sailing directions were never published, but it seems likely that he shared them with the masters of the various ships with which he sailed or had close contact. The published maps of Powell, Weddell, and Norie, described below, contain evidence of having access to Fildes' material in the form of names he applied to places. Fildes himself revised a new edition of the Powell chart in 1828 and the sailing directions provide detailed information for entering key harbours and for navigating straits, identify navigation marks in the form of islands, peaks, capes etc, and provide remarks on the tides, depths, and relative safety or dangers of anchorages such as rocks, reefs, strong currents, and adverse winds. Rough charts of Blythe Bay, Deception Island, Seal Rocks off Elephant Island, Johnson's Dock, and Penguin Island/Georges Bay are included in the manuscript (see Figure 6). Fildes' notes and charts stress the dangers in navigating the totally new territory of the South Shetlands, dangers emphasised by the sizeable loss of ships in the three-year period after their discovery, including two of Fildes's own vessels.

Fildes' directions also contain advice on sealing grounds, such as that given here for Byers Peninsula, Livingston Island:

New Plymouth to a sealer possesses these advantages; should you have men on the North beach which is a good & extensive sealing ground, when the weather does not admit of your boats getting round the Start [point], you can pull to the East part of the Harbour, and carry their supplies overland you can likewise walk over to the south beach which did abound with both seal and Elephants and take to the tents anything they may stand in need of... Indeed in all Shetland there is no place with such an extensive line of beaches where seal come up as about here & if you have no Shallop [a small tender vessel], necessity compels you to be near your boats crews. (Fildes, 1821-22: np)

Fildes give graphic personal commentary of particular dangers, such as his description of the south-western exit from New Plymouth (already encountered in Sherratt's chart):

call'd Hells Gates where many boats & lives have been lost, it runs into the Straights of Despair [Morton Strait] which straights lie between Snow Is<sup>d</sup> and Livingston & Ragged Is<sup>d</sup> in these straights the tide runs like a sluice which creates an overwhelming sea with dreadful whirls. No vessel should in my opinion attempt these straights, though I have come through them in a Shallop but was near lost by striking a sunken rock. We were oblig'd to run on shore on Snow Island to save our lives. (ibid)

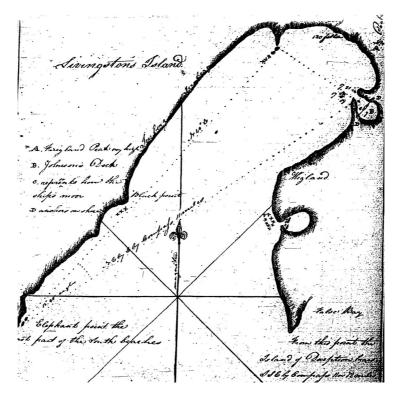


Figure 6 – Fildes' (1821) chart of the un-labelled South Bay, Livingston Island, shows the location and form of Johnson's Dock anchorage (B at top right), and Elephant Point, the eastern-most beach of the South Beaches of Byers Peninsula (bottom left). Directions to Deception Island at bottom right.

The imperative of finding a safe anchorage for the sealing ship is also reflected in Fildes' journal entries. He gave instructions to his boats, sent out in search of seals, to always look for a safer anchorage than where the ship was currently moored (and was subsequently sunk). They returned reporting the loss of another ship, the *Clothier*, when trying to find a new harbour (in fact the one in which Fildes would lose his next ship the following year), and the mooring of eight American ships at Yankee Harbour, "a place scarcely deserving the name", and so Fildes determined to stay where he was (Fildes, 1821-22: np). This episode emphasises the difficulties in discovering the lay of the land in the intricate lacework of islands and straits, and the overriding concern for ensuring the safety of the ship, their only home and escape option from this distant and challenging archipelago.

While he was an active player in the sealing season, Fildes was also conscious that other sealers were out looking, as he was, for new sealing sites and safer anchorages, and he fostered secrecy on both counts. He gave orders to his boat crews:

and as our present situation Port Wood not appearing to have been discovered before, and me wanting no body here but my selfe I likewise gave them orders to conceal our present situation and our success also, but above

all to endeavor to find good holding ground and a harbour safer than (if any hereabouts exists) our own. (Fildes 1820-22: np)

After Fildes lost his ship in January, however, his personal interest in secrecy about sealing grounds and anchorages disappeared, and his sailing directions appear to be totally open, hiding nothing. That the names he applied were used in the published maps by Powell, Weddell, and Norie (see below), clearly indicated that his information had been shared.

Fildes named or first recorded already existing names (as he acknowledged) for 28 places. Two-thirds of these are descriptive names reflecting the appearance, locations or attributes of the place, or similarity to another place that makes them readily identifiable, and reflect his desire to make navigation, by recognition of landmarks, clear and safe. A quarter are named after family members, sealer friends, or naval officers. He sometimes also gives the alternate name used by US sealers, or by other sealers, and on at least one occasion later corrected a name when he found it had been named earlier (changing Port Wood back to its earlier name Blyth Harbour) (see Table 1). Fildes' journal, sailing directions, and naming pattern indicate clearly his intention was to describe the harbour and straits of South Shetlands to make it easier for sealers to navigate and identify their position.

#### d) George Powell's chart (1822)

The chart published by the sealer George Powell in 1822 (Figure 7), detailing his voyages in the sloop *Dove*, "is easily the best chart ever produced by a South Shetland sealer" (Gould 1941: 229). The chart was accompanied by Powell's 'Notes on the South Shetlands' (Powell 1822b), which describes the north coast of the archipelago and the discovery and charting, in the company of US sealer Nathaniel Palmer (in the sloop *James Monroe*), of the Powell's Group some 500 km to the east of the South Shetlands archipelago, later named by James Weddell as South Orkney," as it is still known. Powell was an explorer at heart, much to the frustration of Nathaniel Palmer. On discovering Coronation Island in the South Orkneys he:

told Captain Palmer that I intended to land in my boat, he said it would not be worth while, for they could see no prospect whatever of any seals... at this place we landed, and took possession in the name of King George the Fourth, leaving a bottle, containing a note, stating the particulars of the discovery. (Powell, 1822b: 8).

The different motivations of the two are clear: Palmer, reflecting the attitude shown in other surviving American sealer logs, was there for the seals. Powell had mixed motivations, one was to get seals, but just as importantly, he had a desire to explore. The claim over territory reflects also the cultural trait exhibited by many British sealers, the wish to be part of the British imperial enterprise, a performative practice that emphasised Britain's global economic (and, perhaps, perceived cultural) dominance. The American sealers did not seem to share this imperialist leaning, nor did they share the desire to record geographical discovery in charts for a wider, sometimes ill-defined, scientific audience. There are no American charts of the South Shetlands from this period.

Unlike the Smith, Bransfield and Sherratt charts, Powell's is the first published chart to depict all the main islands and straits of the archipelago with some semblance of accuracy. Powell, in his accompanying notes (1822b), acknowledges that he had not been on the south coast of the archipelago himself but relied on "the descriptions and sketches of my

friends, Captain John Walker [of the snow John], Captain Ralph Bond [of the brigantine Hetty] and Mr. Charles Robinson [of the sloop Pomona]... and the information I have received from other masters of vessels" (ibid). Powell also had some very sketchy information about the Antarctic peninsula, then referred to as Palmers Land, from Nathaniel Palmer, who kept no detailed journal or charts of his voyage there. The chart therefore reflects the combined knowledge of a number of prominent sealers, an act of sharing again counterbalancing the oft-claimed secrecy of sealers. The pragmatic reason for the extensive explorations by Powell, Palmer, and later Weddell, was the need to find new sealing grounds, necessitated by the very rapid collapse of the known South Shetland grounds due to over-exploitation, but Powell and Weddell used that necessity to further their exploration for its own sake.

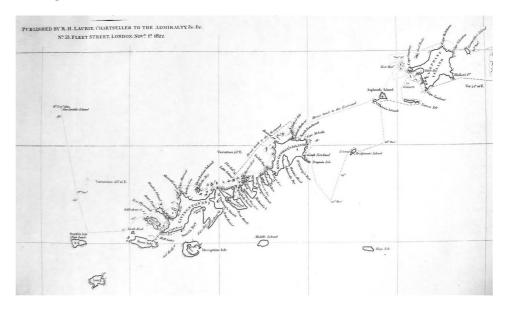


Figure 7 - Detail of Powell's chart (1822), the best made by a sealer in the South Shetlands.

The 1828 edition of Powell's chart, published like the first by the prominent London map seller R.H. Laurie, was revised by Robert Fildes (Powell having died in Tonga in 1824) and incorporated information from James Weddell's and James Hoseason's explorations. I have been unable to access a copy of this edition of the chart, but another chart published by the chart maker J.W. Norrie as a "chart of New Shetland with the tracks of Mr. Bransfield, HMS Andromache 1820" (Norrie 1828?, copy in Campbell, 2000: 76-77), also combines information not available to Powell, including in particular the mapping of Hughes Bay in Trinity Land from Hoseason's survey of 1824. Little on this chart appears to have come from Weddell, nor is it a direct copy of Powell's 1822 chart. It uses many of Powell's names, but is less detailed, and while the shape of each island may reference Powell, they are all significantly different. The genesis of this chart is as yet unclear.

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<sup>&</sup>lt;sup>1</sup> A snow (also snaw or snauw) is a two masted sailing vessel with smaller sail behind the main mast.

The sealer origin of the Powell and Norrie charts is reflected in the naming of places not named on previous maps: around 66% of the names are descriptors or attributes of the places, and 25% of the places are named after other sealers or friends, with only 5% (2 names) are for royalty (see Table 1). This distinction between 'patronage' names, prominent in naval charts, and descriptive names, more prominent in sealers' charts, suggests the purpose of the charts as practical navigation aids. It would appear that the 'explorer' sealers, particularly Powell and Weddell, had an additional motivation, in presenting their charts as a performance to demonstrate their own contribution to the Enlightenment construction of geographical knowledge, and thereby their importance to an influential audience back home—seeking patronage by geographical mastery rather than by namedropping (although Weddell did both).

#### e) James Weddell's Chart (1825)

Weddell's chart of the South Shetlands, included in his book A voyage towards the South Pole first published in 1827, was compiled using information gathered during his two successful voyages to the South Shetlands in 1821-22 and 1822-23 (Figure 8). Weddell acknowledges on the chart that the "unshaded parts of the Coast are laid down from the information of respectable commanders of ships". Like Powell's 1822 chart, this is an amalgamation of sealers' knowledge. The chart shows the north coasts of Sartorius's (Greenwich), Mitchell's (Robert), and Strachan's (Nelson) islands as "unshaded" coasts, with lines of +++ offshore indicating the many rocks and reefs along this coast. This indicates that Weddell did not visit the north coast closely, and chose not to draw on Powell's 1822 chart, which shows the north coasts in more detail. He also chose to use his own names for the islands and channels, mainly commemorating the ship's owners and former naval mentors and patrons, few of which names have survived in modern usage. Michael McLeod in the cutter Beaufoy, accompanying Weddell (in the brig Jane), sighted the South Orkney Islands on 11th December 1821, just four days after Powell and Palmer had made the first discovery. Weddell returned to the islands in February 1822 and made his own survey (Weddell, 1825b). A number of the names he applied to parts not charted or named by Powell were incorporated in Robert Fildes' 1831 edition of Powell's map of the South Orkneys, and are still in use, including his name for the islands, South Orkney, which replaced Powell's Group.

Weddell's chart also shows the extent of pack ice that prevented his reaching the South Shetlands in November 1823, information particularly useful to mariners and sealers. Weddell, like Powell, was at heart an explorer as much as a sealer, and on his 1823 voyage he "was determined, should I not be successful at the South Orkneys, to prosecute a search beyond the tracks of former navigators" (Weddell, 1827: 18). This resolve led him deep into the sea now named after him, to 74° 15' South, the furthest south reached by humans until James Clark Ross's explorations in the Ross Sea in 1841. Weddell's furthest south claim was taken by some to be just the bragging of a simple sealer, and the ship's owners, Mitchell and Strachan, urged him to publish the book that clearly supported his claims. This close connection between seeking seals and exploration led to many other discoveries/rediscoveries of isolated islands by sealers throughout the Southern Ocean (Pearson, 2016).

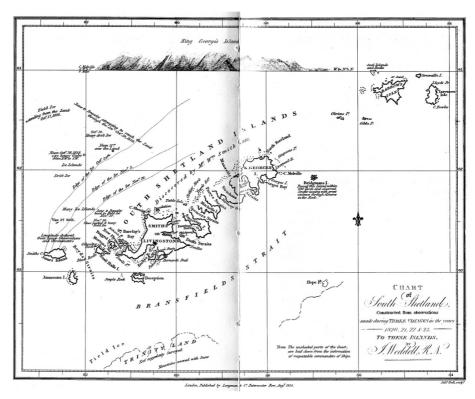


Figure 8 – Weddell's chart (1825). Weddell applied his own names for islands and straits, and left the northern shores as indistinct coasts.

### The contribution of American sealers

Sealing vessels made some 120 known visits to the South Shetlands between 1819 and 1822, of which 65 were from Britain and 52 from the USA, and 2 or possibly 3 from Australia (Pearson, 2018 - based on information from Headland, 2009 and a number of other sources). Despite the number of US ships, the absence of American charts of the South Shetlands has been noted by other researchers (eg Gould, 1941: 233) and there are also no detailed American sailing directions such as those provided by Robert Fildes or George Powell. Just two un-labelled and unattributed charts of Yankee Harbour and McFarlane Strait have been identified as possibly being by Nathaniel Palmer (Martin, 1940). The absence of American charts and detailed journals has meant a continued confusion among US historians about the geography of the South Shetlands. Palmer's movements, particularly in relation to the details of his excursions towards the Antarctic Peninsula (other than his initial exploratory visit to the Orléans Strait), are largely the realm of speculation rather than documentary scholarship, and the confusion of the harbour in Deception Island with Yankee Harbour in McFarlane Strait as the main American fleet base was persistent (eg Spears, 1922; Hobbs, 1939; Bertrand, 1971). There was also an intense rivalry between American and British sealers and subsequently between US historians and their British equivalents - not surprising as the South Shetland sealing era was less than 40 years after the end of the American War of Independence, and just 5 years after the end of the War of 1812. This rivalry is reflected, for example, in the tit-for-tat naming of Yankee

Strait (now McFarlane Strait) and English Strait on opposite sides of Greenwich Island. It is also reflected in the distinct place names given by US sealers – of 27 names given by Americans that I can identify, over half are named after Presidents, sealers, or sealing ships, and only a third are descriptive of the place or its attributes (see Table 2). 15 of the 27 names are no longer in use, perhaps because of the absence of American charts.

While the American sealers were focused on finding seals above all else – as is reflected in the above reference to Palmer's view of Powell's explorations in the South Orkneys – Americans with a financial stake in the sealing industry had more commercial colonialist objectives. Reports of Smith's discovery of the South Shetlands, and the preparation of a sealing fleet from New York to the islands in 1820, led its New York chief owner, James Byers (after whom the most productive sealing area, Byers Peninsula, was named in 1958), to approach the government to send a war ship to protect the sealers and establish a settlement in the islands to guarantee US access to the sealing and whaling resources:

There is not the least doubt in my mind that but the British will attempt to drive our vessels from the islands. Not by open hostility but by blustering and threats. (Bertrand, 1971: 34)

There was indeed documented conflict between the British and American sealers (and between British sealers themselves) – hence the naming of Robbery Beach, the north beach of the Byers Peninsula on Livingston Island, on Weddell's chart. The issue of US economic colonialism spread to the newspapers, accompanied by unsubstantiated (and unlikely) claims of prior US discovery to support the colonising proposal, but the US government took the suggestion no further.

## Analysis and discussion

The study of the six charts of the South Shetland Islands made during the initial sealing era, and of the journals and published works that support them, illustrates how new island territory was made understandable, and indicates a number of factors that influenced how that territory was represented to the wider world. An often complex and interwoven range of motivations for the exploration of the new territory and its presentation in charts and documents included imperialism, commercial exploitation, advancement of Enlightenment science and geography, fostering patronage, the practical needs of safe navigation and resource location, and differing cultural perspectives held by British and American sealers. The tentative delineation of coastlines, caused by problematic fogs preventing close approach to islands and straits, and the slowly evolving picture of the islands, are symptomatic of the challenges in defining a new and totally unknown territory. There was no 'base map' to give guidance, a life-threatening coast might be immediately in your path, and sorting out what was island and what was a presumed continent was a matter of trial and error charting. The evidence of charts and sailing directions in the South Shetland Islands supports Edney's observation that their making is the result of diverse historical processes that are complex and contradictory, and include performative practices as suggested by Rose-Redwood (2015: 4).

The ways in which the new territory was labelled – how place names were used – can be indicative of some of the motives behind the exploration and the challenges of unravelling the geography of the new territory. There have been many systems suggested for defining groups of placenames (toponyms). Here I have used a simplified set of terms that reflect

the characteristics of names found in the charting of the South Shetlands. Tables 1 and 2 present the distribution of naming for the British, the Americans and, for comparison, with a dedicated naval explorer, James Cook's naming practice on the east coast of Australia. The main name groups that I would argue are important in understanding the exploration of the South Shetlands are 'patronage' and 'descriptive' names.

Type of name	Smith	%		Fildes	%		Powell/	%	
							Norie		
Patron/ Naval/	2	26%		7	25%		2	5 <sup>9</sup>	
Royal/ names			69%			25%			31%
Other personal	3	43%					10	20	
names								9/	
Descriptive/		14%		14	50%		25	6	
Attributes			14%			64%		%	66%
Named for	1			4	14%				
similarity to									
other places									
Ships		14%		3	11%			30	
Dates or events /	1		14%			11%	1		3%
other									
associations/									
organisations									
Totals	7	·		28			38		
	-								

Weddell	%		British	%		Bransfield	%	
			sealer					
			Total					
8	23		19	18%		12	55%	
16	46	69%	29	27%	45%	1	5%	60%
9	26		48	44%		7	32%	
		32%			50%			32%
2	69	پ، <b>ـ</b> ر	7	6%	)070			پ، <b>ـ</b> ـر
			3	3%			10%	
		ο%	2	2%	5%	2		10%
35			108			22		

Tables 1a and 1b - Distribution of name types applied by British charts and journals (new names added by each source).

Type of name	US names		
Presidents	4	15%	30%
Personal names	4	15%	
Descriptive/Attributes	8	30%	34%
Named for similarity to other places	1	4%	
Ships	5	21%	36%
Other associations	4	15%	
Totals	27		

Table 2 - Distribution of name types applied in United States of America sealing journals.

Type of name	Cook	%	
Patron/ Naval/ Royal/ names	50	41%	44%
Other names	4	3%	
Descriptive/Attributes	54	44%	46%
Named for similarity to other places	3	2%	
ships	2	2%	10%
Dates or events/ other associations	10	8%	
Totals	123		

Table 3 - Names used by James Cook on the east coast of Australia (Source: Blair, 2014).

The use of patronage names, honouring royalty, senior government figures, naval dignitaries, or past mentors and potential patrons, is seen to be much more frequent on the chart of Edward Bransfield (at 55% of all names, see Table 1), a Royal Navy Master, a Warrant Officer dependent on patronage and favour for promotion. A similar, though less exaggerated example of this Navy approach is seen in James Cook's use of patronage names in his charting of the east coast of Australia. Cook, a newly created lieutenant, used patronage names for 41% of places, closer to Bransfield's 55% than the combined British sealers' proportion of 18%. Bransfield's usage, and the basic nature of his chart, suggests clearly that he was engaged in a performative act of discovery for the benefit of a distant naval and patron establishment, rather than attempting to make the South Shetlands 'known' for the purposes of close navigation and the exploitation of seals.

The other purpose of patronage names is to mark a national claim to the newly discovered land, by applying the names of those prominent in the establishment of the nation - what has been called "toponymic colonialism" (Harley, 2001: 181, 199). While the naval explorers, as official representatives of their nation, and having a stake in the extension and security of the empire, used patronage names most frequently (as highlighted by the Bransfield example), the British sealers also exhibited a cultural propensity to stake national claims. Smith and Powell both made specific sovereignty claims on the (unofficial) behalf of their monarch, and applied patronage and nationalistic names to reinforce that sense of ownership and control through demonstrated knowledge of the place. The Americans, however, were by no means free of colonial intent either, though in their case with the sole motive of protecting commercial sealing interests, as shown by the efforts of Byers and others, referred to above, to occupy the South Shetlands as a form of commercial imperialism. The later lengthy attempts to demonstrate Palmer's discovery of Antarctica could also be seen as being motivated by an (unofficial) desire to establish in the 20th Century US priority and thereby a right to territorial control to match that of Britain and Russia's rights through discovery.

The use of purely descriptive names for features, to help others identify them, was much more frequent in sealing charts, especially those of George Powell (with 66% of such names). Descriptive names, it could be argued, reflect the aim of knowing a place, by describing it so others may identify it with greater ease. Cook, the consummate explorer, used this name type in 46% of his names on the Australian coast, slightly more than his use of patronage names. Powell drew on the experience of other sealers and had a desire to explore and contribute to geographical knowledge. Robert Fildes, who had lost his ships early in two successive seasons and was able to concentrate on how to understand and

navigate the islands rather than gather seals, also used 50% of descriptive names. Using another lens, it might be interpreted that Powell and fellow explorer-sealer James Weddell were also seeking patronage, though not through flattery by applying names of the rich and famous so much as by demonstrating a desire to advance the interests of Enlightenment science and geography through discovery, and hence elevating their own status in the eyes of the influential British intellectual establishment.

The Americans, by contrast, only used descriptive names for around a third of the places they named. The remainder were split roughly between personal names (30%, half of them for the President [15%], akin to the British sealers' patronage class [18%]), and sealing ships or other associations (like 'Yankee') (36%). How to explain this difference? The British sealers (and their owners) seemed to be much more attuned to the exploration ethos than the US sealers. Many of the British had previous experience in the Royal Navy (this was, after all, just five years after the end of the Napoleonic wars in 1815, which intensified the dramatic demobilisation of the Navy that had started in 1805 after the Battle of Trafalgar). There had also been a long association between the Navy, the merchant marine, and the scientific and geographical aims of the Enlightenment. Several of the sealers (Powell and Weddell in particular) became explorers in their own right, Fildes and Powell made sailing directions for the islands, and all of the known charts of the archipelago from the sealing The Americans seemed not to share this desire to be part of the geographical enterprise to the same extent. The US sealers certainly shared information about the islands, but they were not so interested in discovery and description for its own sake and saw no purpose in creating charts. The retrospective attempts by US historians to give pre-eminence to Nathaniel Palmer as an exploration hero - without his having made any detailed journals or charts - were not reflective of the American perspective during the sealing era.

Most of the names applied by British sealers are still used today, but only twelve of the American names survive, probably because no early American chart was made that would enshrine them. Other current place names, applied during the mid-late 20th Century, include a large number of names of individual sealers and ships: a fitting memorial to the era, but one that causes confusion in distinguishing between what the sealers themselves thought worth naming and what later map makers chose to commemorate. Modern nomenclature can be as much an expression of "environmental imperialism" (see Howkins, 2017) as national and commercial imperialism was for some of the sealers.

The different perspectives of British and American sealers, expressed in the approach to journals, charts, and toponomy, can be seen as reflecting broader cultural and social differences between Britain and the USA. The relatively new United States held, and aggressively asserted, different social values and political aspirations to those of Britain. Britain was strongly class-based with governance and wealth in the hands of an established ruling class. Its wealth was based on its growing industrial and manufacturing dominance, with access to raw materials and to markets supplied by an empire secured by an unchallengeable navy. The USA had left that empire by revolution just 40 years before and had been at war again with Britain from 1812 to 1815. It had ongoing commercial, political, and maritime disputes with the British, and unsettled territorial relationships with American territories of Britain, France, and Spain. While the British Navy, and to a slightly lesser extent British sealers, honoured Royalty, the aristocracy, senior politicians, and naval figures with patronage names, reflecting the realities of power structures and empire; the equivalent names used by the Americans were for presidents, elected symbols of their independence and their fundamentally different political philosophy.

The US was born out of Enlightenment thinking, particularly in moral and political philosophy, but though its scientific institutions, such as the Philadelphia-based American Philosophical Society (1743-) and the Academy for Natural Sciences (1812-), were growing, they still lacked the national status and establishment support enjoyed by the Royal Society (1660-) and the various philosophical societies in Britain. The first chart of the South Shetlands was published by the Edinburgh Philosophical Society (Figure 3). In Britain, the scientific institutions and the Royal Navy were actively involved in global exploration, whereas in the US there was no tradition of international exploration, the priority being the geographical definition of the North American continent and the growth of the United States, which nearly doubled in size with the Louisiana Purchase of France's Mississippi territory in 1803, leading to the expedition of Lewis and Clark from the Mississippi to the Pacific Ocean in 1804-06. While Britain focused on exploration as a tool in maintaining and expanding its global commercial and colonial empire, with the enrichment of science as a by-product, the US focused on exploration as a tool in expanding and securing its landbased national territorial interests in the face of British expansion across Canada. This difference in perspective helps explain why British sealers so easily melded the commercial with the exploratory objectives of sealing, while American sealers had little interest, beyond ensuring the success of sealing, in the geographic exploration of an area with no importance to the immediate future and security of the USA.

As can be seen from the discussion of the charts, the desire for secrecy to protect knowledge of sealing locations and anchorages was balanced with the open sharing of information about the islands. As Fildes' journals indicate, the initial desire for secrecy could easily become redundant - other sealers could find your beach or anchorage, or you could lose your ship (as Fildes did) and have no further need for secrecy, and in any case there were relatively few sealing beaches so most were quickly found, and the local seal populations on them quickly declined to the point of being unprofitable, so secrecy soon lost its purpose. As a counter to the idea of the prevalence of secrecy is the clear evidence of the sharing of geographical information between sealers. The fairly common use of the same names for places by different sealers (shown in charts and journals) indicates a wider and more generous sharing of information than the secondary literature often implies. It may be that sharing information important for safe navigation was viewed as a humane act in which all benefitted, while information about where seals might be found remained concealed. It provided a growing collegiate image of the territory within which all had to work and hopefully survive, without necessarily divulging commercial-in-confidence information about the seal resource. As has been shown, some of the sealers' charts were eventually incorporated into published maps, in several of which the makers acknowledge inputs from a number of sealers, and several sealer journals refer to information provided by other sealers' explorations, in particular with regard to the Antarctic Peninsula (eg Davis quoted in Stackpole, 1955: 47; Bertrand, 1971: 106). After the loss of his ship, Fildes was free of personal interest in maintaining secrecy, and while sailing around with other sealers he proceeded to write sailing directions and sketch charts for the main straits and harbours in the South Shetlands used by the sealers. There were joint expeditions and sharing of resources between British and American sealers (most notably between Powell and Palmer), and the charts were created (by the British) for common use. Multiple references in journals and charts indicating the alternative names for landmarks that had been applied by other sealers suggests that this information was also shared widely. It is also the case that by the time the few sealer charts had been published the sealing boom had ended, the seal population reduced to the point of unprofitability.

A study of sealers' charts and journals from the 1819-1822 exploration of the South Shetlands reveals a complex process of integrating a new territory into the knowledge systems of world commerce, geography, and politics. To categorise the motivation and behaviour of sealers in the South Shetlands as being purely commercial (the extension of global capitalism), or purely driven by imperialism (the extension of national power through colonial annexation or imperial influence), or constrained by the need for secrecy about resource location, is to underestimate that complexity, and to ignore the critical role that the decisions and practices of individual sealers, shaped by their individual and shared social and cultural backgrounds, had in that encounter.

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