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How thatch and drangs saved ships and lives in Scilly

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Ships and lives were saved around the Isles of Scilly through the knowledge, skill and courage of island pilots who went out to board vessels in gigs, six-oared sea-going wooden boats. Pilot gigs were built and used in the past both on Scilly and in Cornwall. Gigs built in the traditional way are rowed and raced today across the region and beyond; world championship races are held on Scilly each year. This article considers the archaeological remains of the sites where the old gigs were once based, visible on Scilly's shores and inter-tidal rocks.

This article expands on and further interprets the results of the 'Porths and Gigs of the Isles of Scilly' project, carried out by Cornwall Archaeological Unit in 2024–25. Specifically, it explores how the Scillonian pilot crews worked from the porths, using the capacity for the vital trade of pilotage afforded by the historic landscape they inherited and the natural forces shaping the islands' coasts.

In 2024–25 Cornwall Archaeological Unit (CAU) designed and carried out the 'Porths and Gigs of the Isles of Scilly' project for Historic England as part of their 'Monument Management Scheme'. The project focussed on the gig archaeology in the porths or coves (called 'pars' on Scilly) that is increasingly vulnerable to coastal erosion, storm events and sea-level rise. A project website and report (Parkes 2025) record the archaeology, connect it with local knowledge, and present measured site surveys and virtual 3D models.

The project investigated the deployment of pilot gigs, studying the porths where gigs were based, and examples of the hilltop lookouts the pilots used (not discussed in this article). It looked also at how the sites in the porths show other aspects of traditional island life and how they reflect past coastal change. Core objectives included helping to connect the archaeology with the stories of particular, named, historic boats; and making results accessible on the islands and in the gig rowing community.

The team carried out survey and scanning at selected sites on each of the five inhabited islands. We also visited other sites, to assess them and seek local knowledge. All the 'Porths and Gigs' survey plans appear in this article.

The surveys of Innisidgen and New Quay, St Mary's, and Peraskin (or Porth Askin), St Agnes, take in the whole of the beaches of those porths, where pilot gig archaeology is exposed at low tide. The plan recording the vulnerable low-lying shed used for the gig *Czar* at Great Porth, is focused on that site only; since the only other pilotage site visible at that porth, the shed of the Golden Eagle, is a restored building. The *Czar* gig shed is a scheduled monument, first designated in 1997 (National Heritage List for England (NHLE) 1016173).

Some screenshots of the project's 3D models feature in this article; many more models can be accessed on the website, including several of pilot lookouts, and others recreating parts of old gigs. The report (Parkes 2025) also includes a table of sites, providing further details of gig archaeology referred to here.

The pilot gig boats of Scilly and Cornwall

The landing-place infrastructure discussed in this article was designed to accommodate the gigs, long, six-oared rowing boats, measuring approximately 32 feet by 8 feet (10m by 3m) (Fig 2). Boats of this type with seven or eight oars appear as embellishments on a drawing of 1620. The wider image shows the church, glebe land and adjoining creek at St Just in Roseland, the coastal region east of the Fal estuary in Cornwall (Kresen Kernow, ACSS ARD/TER/637; Dr Joanna Mattingly, pers comm). Gigs were later limited to six oars, to make it harder for them to evade pursuit by Customs cutters (Jenkins 1975, 16).

Around 1800 gig design was advanced significantly by master shipwright William Peters of Polvarth at St Mawes on the Roseland. Boats from Peters' yard were particularly prized, and seven of the eight historic gigs remaining on Scilly

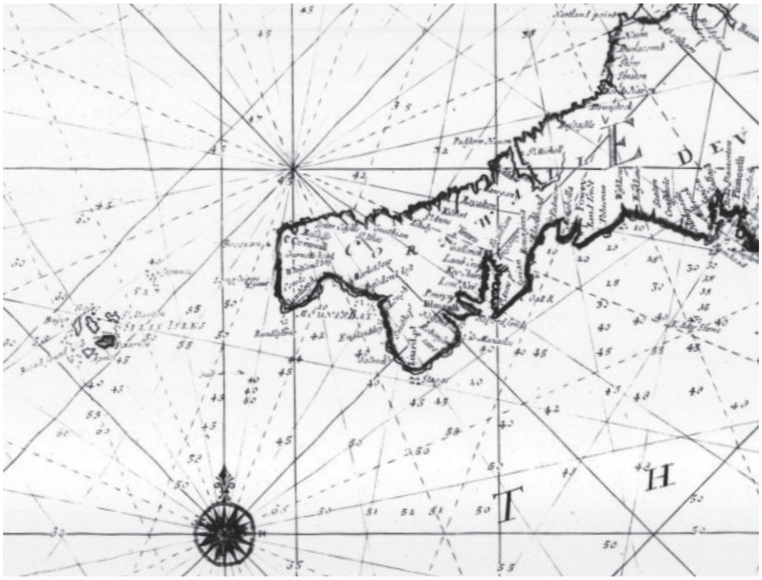

Fig 1 Historic map showing the location of Scilly (left) with Cornwall some 45km to the east. Extract from charts by Greenvile Collins covering the western approaches to Britain, published in 1693 when the age of the gigs on Scilly was under way. Collins' pilot book also includes a more detailed survey of Scilly, regarded as a lethal hazard to Britain's shipping at that time as witnessed by its rare early lighthouse on the west (St Agnes) and daymark on the east (St Martin's).

Fig 2 Gig shed complex at Perconger (or Porth Conger as it appears on maps), St Agnes, with a gig on the slipway –the Lyonesse built in traditional style in 1988. There are sites of three old sheds in this view, close to the roofed one, left of centre, which was rebuilt to house the Shah. They were set back from the landing place as this was relatively steep-sided and was shaped to serve an early coastguard station now the Turks Head pub with its own slipway (right). (© Cornwall Archaeological Unit.)

today came from there. The lines of the *Treffry* built by Peters for the entrepreneurial landowner of Newquay in 1838 were considered outstanding at the time (Gillis 1978, 4). These lines provide the standard for today's traditional-style wooden racing gigs, maintained by the Cornish Pilot Gig Association (CPGA).

Gigs are 'clinker built' with overlapping planking made of fine elm to give them strength and stability with as little weight as possible (Fig 3). The old boats still weighed seven hundredweight (350 kilos) or more, so carrying them meant a load of some 50 kilos each for six rowers and a cox. They were shaped primarily to be rowed fast into head winds, as ships requiring pilotage would generally be coming up with the weather (Milly Edwards, Roseland Gig Club, pers comm). Boatbuilders progressively improved their designs to enable greater speed, the pilots pulling out from the islands to reach the ships being in competition with each other.

Historically, gigs could be fitted with a mast when needed. An early description refers to the boats, 'bred' and valued for swiftness like horses in England, as being supplied with sails as required (Heath 1750, 39). Gigs could be owned and worked in conjunction with larger sailing boats known as pilot cutters. Gigs and cutters in the same ownership could be based at separate porths, however. With the provision of the necessary infrastructure, explored below, gigs could be housed on rocky but strategic shores where cutters could not be safely kept.

Rowing in traditional style wooden gigs is a thriving sport today, with races throughout the summer as well as annual championships on Scilly

Fig 3 Screenshot from virtual 3D model of sample gig planking dating from the building of the Nornour by Gerald Pearne of Looe in 1971. (Model by Tom Goskar; planking kindly made available to scan by Andrew Hicks of Porthloo boatyard, St Mary's). (© Cornwall Archaeological Unit.)

(Fig 27). Many thousands of people participate in gig racing, coxing, training, social rowing and supporting, with multiple benefits to individuals and communities.

The age of the gigs

Documentary research, for example in the archives of the Duchy of Cornwall, might increase understanding of the early development of pilotage. It is clear that Scilly's use of gigs has a great timespan, exciting to contemplate.

The presence of gigs is implied by records of boats speeding out to save survivors from the wreck of the East Indiaman *Royal Oak* in the Western Rocks in 1665 (Cummings 2016, 412) (and for a later seventeenth century reference see the section on zoning in the past deployment of gigs within Hugh Town, below). In the period *c* 1600–1660 some Scillonians may have understood the Cornish language still, as well as English (Thomas 1985, 36). Perhaps some early gigs were named in Cornish, as some are now with revived interest in Cornish identity. Gigs were still in regular use in the decades between the great wars of the twentieth century; one effectively helped bring electricity to St Martin's by landing a generator on Lower Town Par, for example (Fig 4).

The period of over 300 years reaching up to the mid-twentieth century may then be regarded as the 'age of gigs' on Scilly. In that era gigs supported island communications, transport, and livelihoods gained from the sea, although there were many changes in their usage over time. Notably, in the early nineteenth century gig ownership fell away, before recovering, with the restriction of pilotage to a limited number of licensees appointed by Trinity House, and with the failure in this period of other traditional livings.

In the gig age, the main inhabited islands, separated by their inner sea with its shallower waters criss-crossed by deeper sounds, were well connected by the gigs. These boats could be rowed, or pulled as it is traditionally termed on Scilly, in as little as half an hour between islands. They could potentially sail over in half of that time (depending on sea states and winds). At work in the open sea, gigs could range far in favourable conditions. They could reach West Cornwall in a day, for example, as in 1873:

> A six-oared pilot gig pulled from St Mary's Scilly to Sennen Cove on Tuesday in eight hours and twenty minutes. She had a little head wind from the N.E., and a little lop in the sea, but on the whole she made a nice passage. The distance is from twenty-five to thirty miles (*Royal Cornwall Gazette,* 01 November 1873, p4).

Gig crews undertook salvage and rescue from wrecks, and they could contract for other maritime work such as lighthouse tendering (Hicks 2015, 1–2). Pilots brought correspondence to the islands, as well as verbal information they gathered on ships while working around Scilly and away in the English and Bristol Channels. They would put out from Scilly to meet homeward-bound British ships and negotiate with their captains to estimate the quantity of mail made up in packets for the islands. They paid for the packets, trans-shipped

Fig 4 Lower Town Par, St Martin's, 1930. Bernard Bond, left, is about to load the generator landed on the beach on to his cart. (Photograph copied and information recorded by Michael Tangye in 1987, courtesy of Mrs P Howell; reproduced here thanks to Mr Tangye.)

them to the gigs, and landed the mail to claim Post Office dues of a penny per letter and a halfpenny per newspaper (Uren 1907, 40). These transfers developed into a busy trade. The incoming post increased in the later nineteenth century from a small bundle to over 5,000 letters a week.

Documentation of pilot gig sites

Early reports of pilotage often feature tragedies such as the loss of pilot John Macey, who capsized while sculling a punt to reach his boat and was drowned (*Royal Cornwall Gazette* Saturday 29 November 1834, p2). From the mid-eighteenth century, visiting gentry, or ministers or officers stationed here, wrote more descriptive accounts. They noted the courageous and skilful work of the pilots and its value:

> The Islanders…. are Allowed to be the Best Seamen, and Pilots in any part of the world, for they frequently go out in their Open boats, amongst these dangerous rocks, and bring in Ships…one large Ship in May last….and the Cargo is all preserved, which is of Great Value….(Spry 1800, 10).

Some eighteenth-century accounts also mention how Scillonians grouped together to share costs and earnings, giving rise to hereditary ownership of gigs based on verbal bonds. The gigs themselves, unlike the larger cutters, were not required to be registered and numbered (Hicks 2015, 160–1.) It was said that on Scilly every man had a share in a gig and relied on it for a livelihood (Heath 1750, 39). The large total of gig shed sites now recorded, around 90 at 60 different sites, is consistent with this – although the known sites include sheds built and used at different times. There may be some additional early shed sites that are unknown, having been eroded away, or buried in blown sand, or, in Hugh Town, redeveloped, in the past, before they could be captured on maps.

Several histories of the pilot gigs and cutters of Scilly were written in the decades after the Second World War. Alfred Jenkins of Scilly documented around 70 gigs still known by name at that time, and, especially for St Mary's, noted the porths or even specific sites at which some of the boats had been kept (Jenkins 1975). Richard Gillis recorded his visits to Scilly with other rowers from Newquay in Cornwall looking to purchase gigs around 1950. He referred to the islands where some gigs were based, and occasionally mentioned particular porths (Gillis 1978). Both these histories drew on Scillonians' first-hand experiences or family stories of traditional pilotage. Jenkins identified a number of his local informants, whereas Gillis tended not to. Both had sight of gigs' logbooks and apparently other original sources not generally fully identified or referenced in their publications.

The 1st edition Ordnance Survey 25in: 1 mile maps (OS maps) of 1887–88 provide an important record. They show gig sheds, identifiable by their shapes and positions (sometimes labelled 'Boat House'). They also depict ways through the inter-tidal rocks, aligned with sheds, for gigs to pass at low water (the 'drangs', or 'trackways', featuring in the discussion of the porths' affordances, below). The evidence of local knowledge, archaeology, and historic mapping, combined, allows sheds (or at least groups of sheds) used for 22 of the historic gigs known by name through Jenkins' work to be located. Such evidence also reveals details of how the porths were used, as the bases for these gigs and for others now lost from memory.

Archaeology of pilot gig bases

The age of the gigs has left diverse archaeology in the landscape. The 'Porths and Gigs' website and report (Parkes 2025) present both the archaeology of the shoreline gig sheds, and other associated remains, including the hilltop lookouts that served for the visual information gathering and communication essential to pilotage and to the gigs' shipwreck salvage and rescue work.

The 'Porths and Gigs' survey work was centred on the gig sheds, increasingly at risk from coastal change since they had to be placed on the edge of the shore so the boat crews could reach ships and secure pilots' berths ahead of their rivals. The sheds were critical for pilotage in the past. Although gigs could ride at moorings at times, housing was necessary to protect them from storm damage. Above all, every day, it prevented them from excessive drying out, and so prolonged their lives which can span generations as shown by the preservation in use today (through restoration work) of old gigs some of which date from *c* 1830.

The gig sheds are characterised below. The other main coastal infrastructure intrinsic to the use of the sheds is introduced following that, in discussing how the pilots used the situations the porths afforded in order to run their operations.

Character of the gig sheds

Numbers and survival of sheds

The 'Porths and Gigs' project has plotted historic gig shed sites on aerial photographic coverage of Scilly, to help show how their deployment related to land and sea. The resulting mapping has been adapted for this article (Figs 29 and 30). The project findings indicate some 60 sites of one or more sheds, with around 90 sheds between them (counting double sheds as two), although totals are approximate. Some smaller boat houses known only from maps may once have been gig length, and some sheds indicated by other infrastructure were seemingly eroded away prior to the surveys for the OS maps of 1887–88.

Where the inter-tidal zone was sandy, it would not have been necessary to make provision for gigs to pass through rocks, so no drangs (or historic map evidence of them) would be present to point to any lost shed sites. One such place could be Pelistry, St Mary's, whose Cornish name means 'boat porth' (Thomas 1985, 44). A primary route links Pelistry to the hamlet of Holy Vale, a central place in the past figuratively as well as literally. The porth is sandy and could well have had gig sheds lost to erosion or sand blow and not indicated by drangs.

Half of the 90 sheds survive as standing buildings or other visible archaeological remains. Five (two of which form a double) are restored or

Fig 5 Former shed of the 1886 gig Sussex at the Bar on Bryher, restored by the Duchy of Cornwall. The shed houses the 2020 gig Alfie Jenkins, and also a display on pilot gig heritage in a small timber lobby. (© Cornwall Archaeological Unit.)

Fig 6 Archaeological survey specialist Mark Bowden recording the gig-shed sized earthwork at Innisidgen, St Mary's. The bank in the foreground, running diagonally in this view, marks the seaward end of the nearer of the shed's two long sides. Beyond is the Trinity House vessel Galatea working on the ongoing marking for navigation of one of the main channels between the islands, Crow Sound. (© Cornwall Archaeological Unit.)

rebuilt as gig sheds like that of the *Sussex* (Fig 5), one is converted to a studio and two more have been re-roofed to serve as stores. Four at New Quay, St Mary's, stand to eaves height, thanks to the Duchy of Cornwall permitting low-level use with some partial re-roofing to store small boats and their gear. Part of this complex is within a wider scheduled area (NHLE 1015662). The other visible sites are largely represented by earthworks (Fig 6) or by remains of related structures such as slipways. Seven of the 90 sheds are scheduled monuments (SMs) or form parts of larger SMs.

Not all known sheds existed or were in active use at any one time. However, the working lives of many dozens of the gig sheds overlapped. Fifty gigs went out on salvage work in 1871 at one time, on the day after the steamer *Delaware* was wrecked in a hurricane. The crew of the gig *Albion* from Bryher had already reached the scene of the wreck while the storm still raged, saving the lives of the two sole survivors who had clung to a broken lifeboat and were washed up on White Island, west of Samson (*Cornish Telegraph* Wednesday 27 December 1871, p2; Parkes 2025, 39).

Sheds' traditional design and materials

The sheds share a vernacular design in a specialised form, which (with due consideration of landscape setting) means they are readily identifiable even when only their footings survive. They are sized, shaped and positioned to hold a gig ready to launch.

Typically, sheds situated on the low cliffs of *ram* (peri-glacial head) or on banks of sand at the heads of the island beaches. They are placed end on to the sea, or to the route to the sea where access to it could only be arranged to the side due to steepness or lack of space on the edge of the shore as at Porth Conger or Perconger, St Agnes (Fig 2). Some sheds have a marked slope towards the sea. This may have helped speed launching; but in some cases at least, where bedrock protrudes within the shed, it clearly reflects the difficulty of levelling these long buildings into rocky ground. At Peraskin, St Agnes, a shed incorporates outcropping rocks, as do many examples of traditional island structures of other kinds (Fig 7).

Early sheds (built before the late nineteenth century) can be perceptibly boat-shaped, as at New Quay, St Mary's (Fig 8). The newly recorded shed at Innisidgen, St Marys, lying within a wider scheduled area (NHLE 1013271), appears similar. The shape of the shed there is less distinct, however, being defined by turfy banks likely to incorporate collapsed stonework and roofing material as well as the wall bases (Figs 6 and 9). Possibly the boat-like shaping reflects a practical reliance on the strength of bowed walls. This may be seen also in some of the stone facing to the hedge banks in the region, which in plan can take the form of a continuous series of very shallow scallops. Bowing may also have been designed to allow a little more working space around the gigs while slightly limiting the requirement for roof covering.

Shed materials were available in the island environment, and building methods were again those also used for other vernacular structures on Scilly. Sheds of the eighteenth century or earlier, such as those in the well-preserved group at New Quay, show the typical irregular walling of that period. Walls are roughly coursed yet skilfully built, with facing of rubble granite stones or re-used previously-shaped ones, and with mortar made of the clayey subsoil or ram. Later sheds such as that associated with the gig *Cetewayo* of *c* 1882 at Peraskin, St Agnes, had more regular and narrower walls. This scheduled shed (NHLE 1009280) is that numbered 5 on Figure 12. (See further the Conclusion of this article, and Fig 27, for comment on the Zulu name of the old *Cetewayo*, given also to St Agnes' new gig of 2024.)

Timberwork was made from driftwood or salvaged wreck wood. Timbers appear unpainted in old photos (Fig 4). Some could be painted, however; a former shed in Old Town had yellow paintwork as recalled by Kenneth Sisam in 1966 (Isles of Scilly Museum archive, ref 6219).

The roof of the shed was the gig's shield against the drying sun and wind, essential to maintain it in good condition. The earliest covering was thatch, held by broad-mesh nets of rope secured to pegs in the walls near their tops. This 'rope thatch' was used for all Scillonian buildings in the post-medieval period, as observed at the time (Magalotti 1669, 93–4). From the later eighteenth century onwards, some island farmhouses and outhouses were covered in Bridgwater tile from Somerset and Delabole slate from Cornwall. These shipped materials were also used to mend or build anew some gig shed roofs. Other sheds continued to be thatched to the end of their active lives, so that roofs could be made up quickly from the resources to hand.

Fig 7 Base of gig shed at Porth Askin or Peraskin on St Agnes, seen from its open seaward end. This is the shed numbered 1 on the plan and 3D model (Figures 12 and 14), identified and recorded by Tom and Elisabeth Greeves in 2019. Its long walls on either side, marked by low banks with clumps of short heather, run back to the two granite outcrops that were used to make its gable end with stonework filling the gap between them. (© Cornwall Archaeological Unit.)

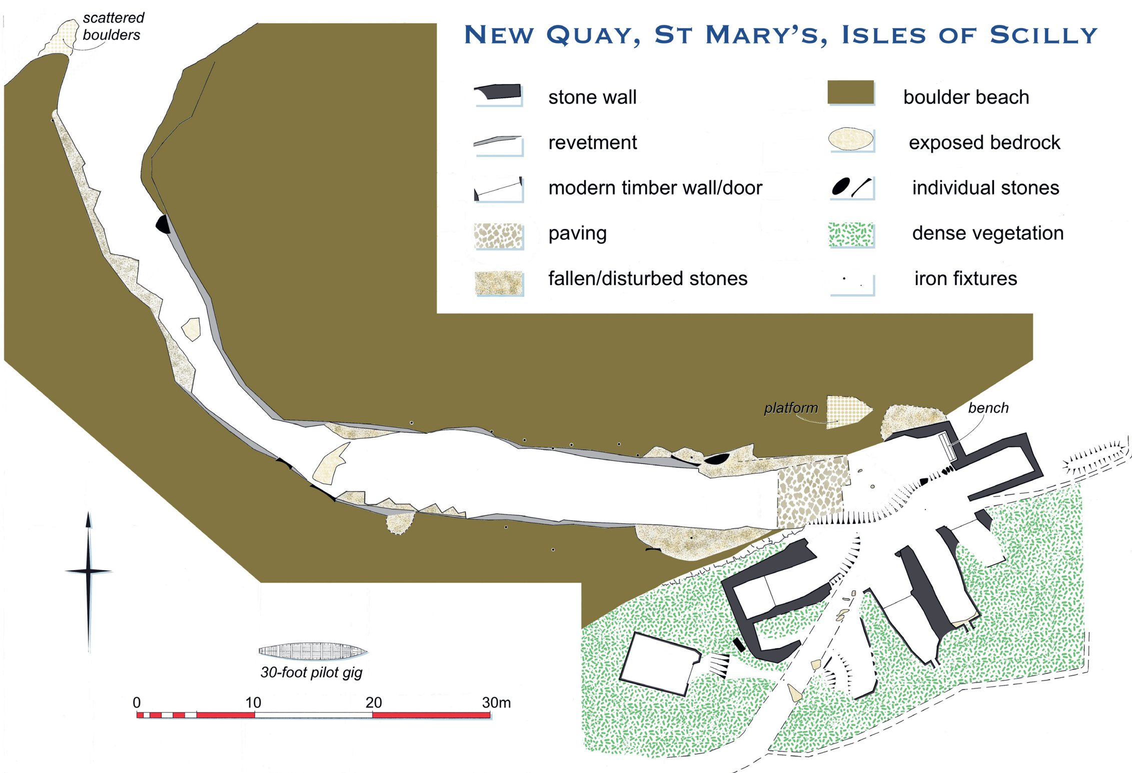

Fig 8 Plan of gig shed complex at extreme low tide, at New Quay, St Mary's. Five sheds, or possibly 6 if that furthest south was formerly longer, were for gigs; that on the north was rebuilt shorter; and two or three were made shorter from the start, to house punts. Several sheds have minor modern adaptations and one has been added on the west replacing earlier stores. Survey lead and drawing by Mark Bowden; survey volunteer Ben Sumpter. Fieldwork courtesy of the Duchy of Cornwall. (© Cornwall Archaeological Unit.)

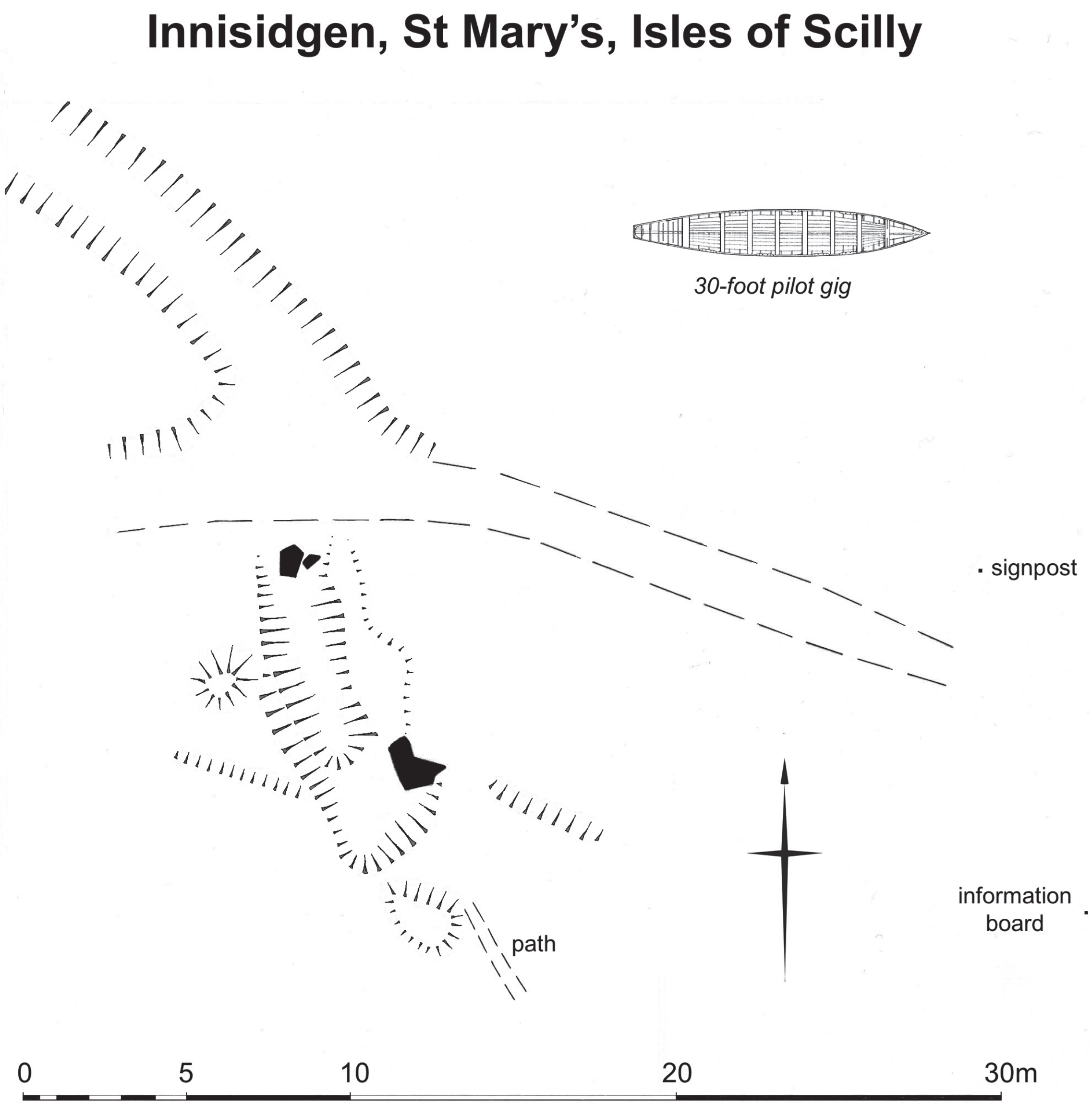

Fig 9 Plan of gig shed earthworks lying above and aligned with a slipway at Innisidgen, St Mary's. The complex is crossed by the coast path, and an information board and signpost for nearby prehistoric archaeology (plotted here) can help to locate the earthworks in summer when the area is covered in bracken. Survey and drawing by Mark Bowden. (© Cornwall Archaeological Unit.)

Straw for thatch was available from the range of crops grown on Scilly, rye, barley, pillas (naked oat) and some wheat (Heath 1750, 22). Straw was supplemented, latterly at least, with material from downs and marshes, as noted at the old shed of the *Czar* by the Pool on Bryher (Fig 10):

A decaying boathouse there shows the old method of Scillonian thatching, though the ropes with which the roof is pegged into the wall are no longer the old ropes woven of straw, and even a length of chain has been employed…. First comes an underlayer of bracken. Then rye straw or reeds from the island pools, then the criss-crossing ropes to lash the thatch down against the wind (Grigson 1948, 39).

Distinctive features common to the sheds include massive stone slabs framing the double boat doorways. Narrow openings were placed high in the gable end, for ventilation and daylight and perhaps for a lantern to be stood there away from the thatch. Flooring was made to be permeable with cobbles set in a layer of soil, again helping avoid gigs drying out (Richard Pearce, pers comm).

Whilst the sheds were essentially functional, the doorways could be styled to convey how gigs were valued. Their openings could be flanked by slabs selected and positioned to project forwards impressively as they rose, as at New Quay, St Mary's (Fig 11); or could have a lintel above carved with the boat's name, as formerly at the *Czar* shed (Richard Pearce, pers comm).

Fig 10 The landward end of the shed of the Czar at Great Porth, Bryher, with its roof still thatched, in the mid-twentieth century (the rising ground beyond is Gweal Hill). The base of the shed remains, and is a scheduled monument. (Reproduced with kind permission © Isles of Scilly Museum, reference no. RN 07507.)

Fig 11 Impressive east side of the opening to the gig shed furthest to the south east at New Quay, St Mary's. (© Cornwall Archaeological Unit.)

Other main types of shoreline infrastructure linked to the gig sheds

Shorter sheds close to some of the gig sheds are noted in the 'Porths and Gigs' report (Parkes 2025). Few survive, and some at least appear to be secondary, made out of former gig sheds. When the OS maps of 1887–88 are compared with the revised editions dated 1906, some gig sheds can be seen to have been restored with shorter roofs in the intervening period. Similar adaptations can be seen in the archaeology, for example at Pendrathen, St Mary's, where a gig shed was re-covered with a rather shorter roof. A few lean-to stores are also known. Elsewhere, gear was probably kept in the roof spaces within the sheds or around their walls (Fig 4).

The group at New Quay, St Mary's, includes several smaller sheds clearly part of the historic layout of the site, as well as five or possibly six houses for gigs (Fig 8). They share with the gig sheds their frontage on the manoeuvring area above the slipway essential for launching, but are not truncated gig sheds (they were cut into the slope behind). Like the gig sheds, they are slightly boat-shaped in plan, and have thick and bulging walls. Provisionally they are interpreted as sheds for punts used for tendering to pilot cutters or other vessels stationed off this strategic eastern shore.

In outlying places, where the settings of sheds are little changed other than by coastal erosion and scrub growth, the ways used to reach sites from inland can be seen. Simple hollow ways worn by footfall in the past are captured in the edges of the surveys at Innisidgen, Peraskin, and New Quay, and at New Quay a gap has been left for a passage between the sheds (Fig 8).

Slipways were made below the sheds to help speed launching and avoid holing the boats' planking that could be just ⅜ of an inch (1cm) thick (Fig 3). Ramps were levelled into the slope where sheds stood on higher ram cliffs, as at Innisidgen. Slipways with laid slab surfaces could be provided, especially it seems where the edge of the ram was steeper but lower, or was rockier or vulnerable to erosion, or where ramps were heavily used for boats or vehicles as in Hugh Town. The shore of the hamlet called Point at New Grimsby on Tresco has well-preserved remains of paved slips. These slipways were captured in a painting while they were still in use (Parkes 2025, cover image). The painting, *A Sailor's Wedding Party* by James Clarke Hook (1819–1907), has been dated to 1862 (Graeme Kirkham, pers comm). Timber 'ways' were used to launch and recover gigs in places, as at Old Town (St Mary's) where planks were laid between two rows of fixed oak posts to form a raised 'way' above rough rocks (Kenneth Sisam's memoir of 1966, Isles of Scilly Museum archive ref. 6219).

Time depth in provision of gig sheds

A new gig could be housed in an empty shed, if a boat had been sold to another island for example. However, a new shed could be needed if none was available (or perhaps where a pre-existing one was held by a rival pilotage concern). Added sheds generally respect the operating area in front of earlier ones, so groups of sheds tended to be in rows. One shed at Peraskin slightly impedes the front of another; these are the sheds numbered 4 and 3 on the plan (Fig 12). (Shed 3 is scheduled together with shed 2 on its other side with which it forms a double shed, NHLE 1009281.) It would seem then that shed 3 had become disused – the OS map of 1888 shows it unroofed – and was not intended for re-use. Old buildings or other works generally became part of the affordances of the islands to be taken up as needed in the future. Perhaps, where such an eventuality was apparently not allowed for, despite continued use of wider site for pilotage, this might be because loss of the gig's crew at sea meant that no-one wished to use the shed again.

Where a shed was added to a pre-existing one, it could be built up against the latter or immediately alongside, presumably where both were held by the same group of pilots. This can be seen at Hole of Cove Vean (or Little Porth) on St Agnes (Fig 13). The 1888 OS map shows the north shed there was rather shorter so probably secondary, and this relationship has been confirmed on site (Ratcliffe and Sharpe 1990, 50).

Evidence for sheds being built double at the start is limited at present to a pair on the back lane beside Town Beach at St Mary's, Thoroughfare (Fig 30, and see further discussion below of the use of gigs in that zone of Hugh Town). These sheds lasted into living memory, Mr. Alfred Trenear recalling playing as a boy around the site when it stood in a sandy corner off the lane which has since been re-developed. The detailed

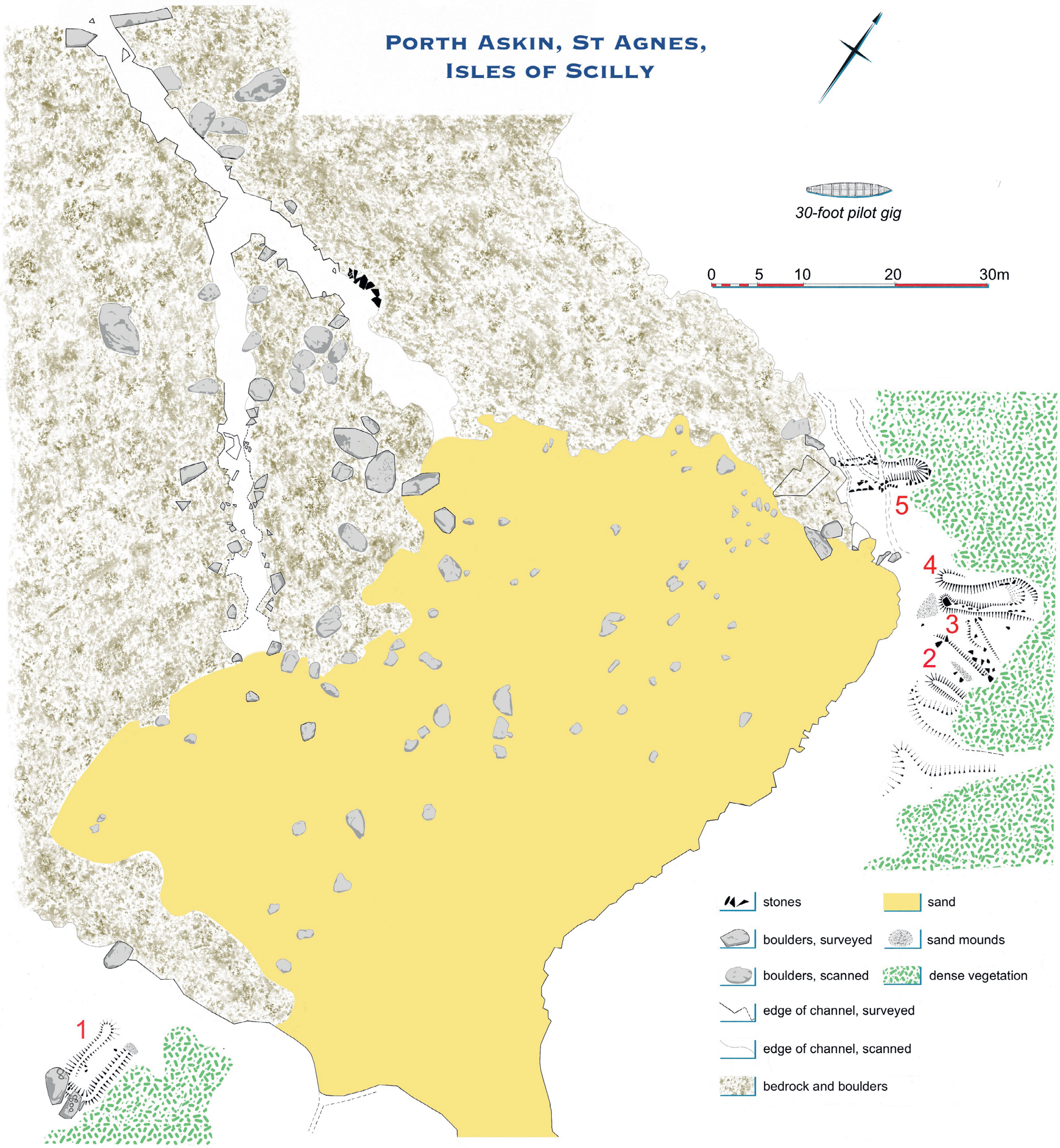

Fig 12 Plan of base for gig pilotage fully uncovered at extra low tide at Porth Askin or Peraskin, St Agnes. The gig shed earthworks are numbered for ease of reference. (Survey lead and drawing by Mark Bowden; survey volunteer Teän Roberts. (© Cornwall Archaeological Unit.)

1887 OS map and an 1862 Plan of St Marys Town (UK Hydrographic Office D6365 Oh), show this site as one squarish block, an indication that the sheds here were built as one. They may have been made for the insurers Lloyds of London known to have kept two gigs on Town Beach (Jenkin 1975, 64). Lloyds presumably did not need to house and work one gig first in order to gain resources to acquire a second, unlike the pilots.

Fig 13 Fronts of doubled gig sheds at Hole of Cove Vean, otherwise known as Little Cove, St Agnes. The nearer of the two sheds was used for the Gypsy before this gig was moved in 1931 to Porth Conger or Perconger on the same island (Patrick Bird, pers comm). (© Cornwall Archaeological Unit.)

Affordances of the porths for pilotage

The age of the gigs was long, and during this time diverse environmental, economic, social, maritime, military and other changes affected the islands. At times communities could not thrive, as recorded especially on St Martin's and Bryher (North 1850, 24–5, 62–3). Samson was permanently depopulated in the mid-nineteenth century (Berry and Ratcliffe 1994, 15). Through many changes, however, the islanders survived. Their knowledge and skills remained vital to shipping, here on the approaches to the English and Bristol Channels, with Cornwall a long day's row off and her leading western historic port of Falmouth a day's sail distant. They knew intimately this highly hazardous haven nearly 16 km (10 miles) across, with its channels and shallows and prolific isles, rocks, reefs, ledges, and sand bars.

The archaeology indicates how Scillonians met the need for their pilotage skills by realising the affordances, changing across space and time, of the islands' porths. Studies of affordance have been used in interpreting landscape archaeology, notably views to and from prehistoric monuments. Viewsheds have been shown to indicate aspects of the original environment, design, perceptions and use of these sites. ('Porths and Gigs' looks too at pilot lookout and signalling networks that took in structures and outcrops also used deeper in the past (Parkes 2025, 48–60)). The affordances of the environment have been defined as ways that places, and people's knowledge, abilities, ways of communication, situations, and events or knowledge of them, can combine to shape practical actions (Stoffregen 2003; Chemero 2010; Gillings 2012).

This concept is useful in looking at the gig archaeology that shows how the pilots worked with what are discussed by Gillings as the 'dispositional properties' or 'orientations to action' of place (2009, 341). Affordances of landscape ashore have been seen as dynamic and complex. People walking on a coast in prehistory, for example, are likely to have experienced sites, as they progressed, through many layers and changes of perception (Stoffregen 2003, 33–6). Going to sea, or working the porths ready to do so, the gig crews had continuous shifts in affordances to perceive, actively observe, and attend to. These shifts may be regarded as far more changeable even than those anciently prevailing on the land – more fluid than dynamic. They varied with the tides, sea state, qualities of the boat and crew, and all the unpredictable stages and hazards of the work in hand and opportunities arising on the water; as well as the topography, weather, daylight and moon phases, views and sounds and atmospheric conditions affecting these, and local lore.

Aspects of this are explored below, drawing on the 'Porths and Gigs' mapping of shed sites around the islands (Figs 29 and 30), together with the surveys of several whole landing places of contrasting kinds (Figs 8, 12, and 23), and a screenshot of one of the project's 3D models of these places (Fig 14). All the interactive 3D models can be accessed on the project website where you can move and zoom around them to virtually experience more of the ways in which the pilots used the porths.

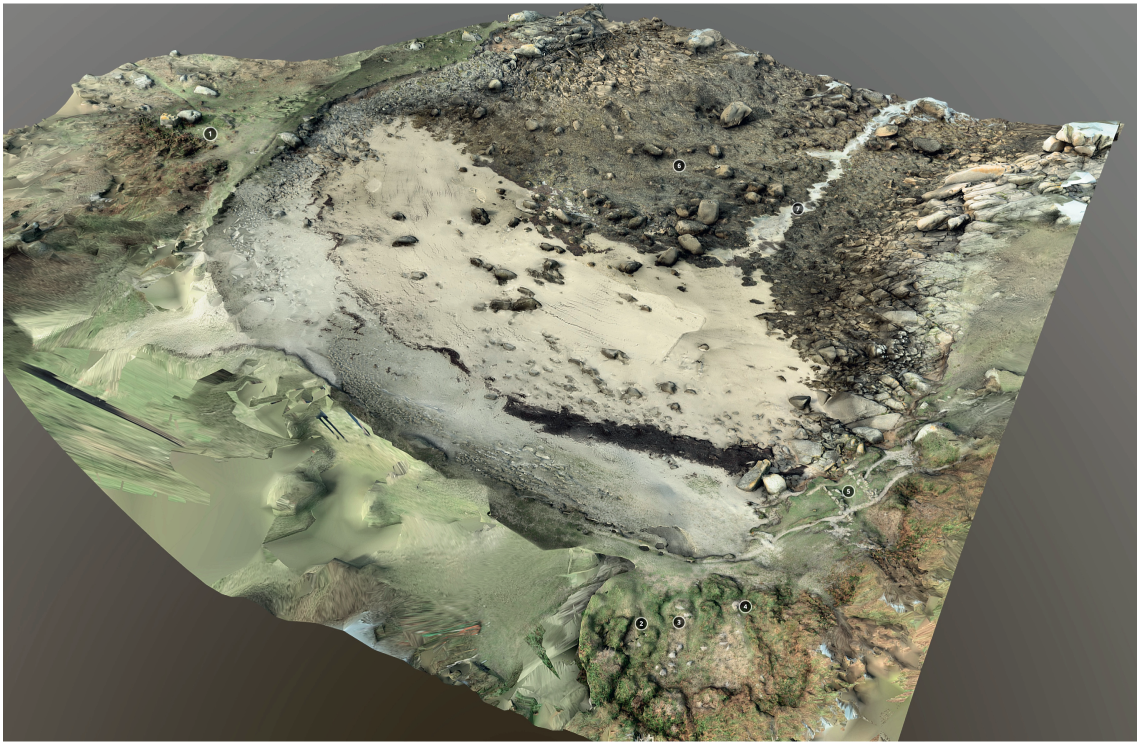

Fig 14 Screenshot from virtual 3D model of Peraskin (Porth Askin), St Agnes, with gig sheds numbered from the south 1–5 and gig trackways or drangs numbered 6 and 7. Model by Tom Goskar; thanks to the Isles of Scilly Community Archaeology Group for vegetation control on site in advance of fieldwork. (© Cornwall Archaeological Unit.)

Selection of porths as bases for pilotage

The islands having no river mouths with navigable estuaries and pills (side creeks) like those of Cornwall, the natural havens of Scilly are instead the deeper and more sheltered waters between the islands, for larger vessels, and, for smaller boats, the porths. The Cornish language word *porth* means 'cove, harbour, gateway' (Padel 1985, 190–1). Traditionally it has been pronounced 'par' on Scilly, and on the south coast and west end of Cornwall (Morton Nance 1963, 129–30).

Wider sandier porths or bays were used as landings also, as recorded by an early tourist who recommended landing for a visit to St Martin's at Perpitch on the south east of that island (North 1850, 64). However, the sandiest shores, by the extensive tidal sand flats that lie between the northern off-islands, were not preferred as bases for pilotage, since they were stranded at low tide, as well as being further from the outer coasts and shipping lanes. This is clear on Tresco, for example, with gig sheds clustered around New Grimsby on one side of the island, and Raven's Porth and Green Porth on the other. These points were outside the shallower waters where the inlets of New Grimsby Harbour and Old Grimsby Harbour, respectively, meet large sand flats (Fig 29).

Porths near the edges of Scilly to the east and especially the west offered more opportunities for pilotage, salvage and life-saving work, as a result of the greater shipping traffic and higher frequency of shipwrecks there. The Western and Norrard Rocks being most hazardous, gig sheds were concentrated on the westerly porths of the nearest inhabited islands, irrespective of greater exposure to the elements or distance from dwellings. Peraskin, St Agnes, at the far south-west tip of the inhabited land, has remains of five gig sheds, the most known at any one porth on that island, and could have had more that have been eroded away or obscured by sand (Fig 12).

Fig 15 Great Porth, Bryher, with its slipway in the foreground and beyond that the grassy ruin of the Czar gig shed (NHLE 1016173). Further south, towards the right in this view, are the Golden Eagle shed with its red roof, and the sandy corner below Great Carn where the gig Venus may have been housed. The site of the double shed of the Albion and March lies on the shore at a similar distance to the north of the Czar shed. (Photograph: © Cornwall Archaeological Unit.)

Grouping of gig sheds within porths

On sandy shores, sheds could be spaced equally. This can be seen on the historic maps, as at Periglis on St Agnes (where the shed sites plotted in 1888 are now buried under sand); and on the ground, as at Great Porth, Bryher. Spacing provided manoeuvring and working areas for sheds. It would also have helped define the domains of competing pilotage concerns. At Great Porth, the *Albion* and *March* sheds (forming a pair which operated together, no longer standing), the separate *Golden Eagle* and *Czar* sheds, and possibly a fifth shed, all serving rival groups of pilots (Jenkins 1975, 58), were roughly equidistant (Fig 15). Where the porths were fringed with rocks and the sea could only be accessed from fixed access ways, sheds clustered at those points to hold an equal advantage – as explored further below in the discussion of the access ways, the drangs, that extend the archaeology of the gigs out under the tides.

Drangs; the keys to the porths

Drangs, routes to the sea made through inter-tidal rocks, were key to the pilots' use of the porths. The shores, apart from the sandiest of Tresco and St Martin's (and in the more distant past, within the historic era, even there in places, as sand has driven in over time), typically have outer belts of boulders that are exposed as the tides fall. In such conditions, only through clearance of ways for the gigs to pass through rocks could porths afford pilotage at all states of tide.

These features are now named 'trackways' on St Agnes (Jof Hicks, pers comm) and 'drangs' on Bryher (Richard Jenkin, pers comm). The name drang, used in this article, was also traditionally applied, on Scilly as in Cornwall, to natural gullies running in through coastal rock ridges. It occurs in that sense on the shore of Shipman Head Down, Bryher. In some Cornish harbour towns the term can mean narrow alleyways too (Morton Nance 1963, 73–4). In the past the term 'lake' could be used on Scilly for gig drangs, as at New Quay, St Mary's (John Williams, pers comm). On St Agnes the trackway or drang at Perconger – later adopted to serve the foot of the slip below the coastguard station, now the *Turks Head* pub, and also shared by several gig sheds (Fig 2) – was labelled 'Lake' on the Graeme Spence survey of 1792 (UK Hydrographic Office, 674, 15e).

Drangs, like slipways, may have been named after gigs they served. Some were named after pilot cutters reached by punts using the drangs, as the cutters were the pilots' greater investments and were required to be registered to the port. The *Atlantic* Slip at Hugh Town, named for the cutter *Atlantic*, was also used for the gig *St Vincent* (Jenkins 1975, 67) (Fig 30). One of three drangs in Kitchen Porth, Bryher, on the important channel and anchorage of New Grimsby Harbour, is named *Rapid*'s Drang after the cutter *Rapid* (Richard Jenkin, pers comm) (Fig 28). This cutter operated between 1848 and 1882 (Jenkins 1975, 53), and the drang may be even earlier in origin (as suggested in the conclusion to this article).

Of the 60 or so places with one or more gig shed now known, 18 have drangs visible on site and/or on the 1887–88 OS maps. Others of the 60 may have drangs too if these were filled with sand before that OS mapping horizon. The drangs were made wide enough for a gig to be carried along them. (Gigs may be dragged, rather than carried, on sandy ground, and sand would be washed by the sea into the drangs which could then allow for dragging.) They were cleared of stone to provide good footing and avoid holing the boat's hull. The spreads of boulders to either side were revetted using the cleared material or other stone to hand. Any larger rocks on a convenient line for such facing were left *in situ* and were linked by other sizeable slabs, and smaller boulders were placed on top although at many sites these have since been spread by the waves (Fig 16).

The pilots' working with the affordances and risks of a porth can be seen at Peraskin, St Agnes (Figs 12 and 14). This place, closest to the Western Rocks, may have been adapted for pilotage relatively early, as the seaward end of the drang remained waist-deep at the extreme low tides which the 'Porths and Gigs' survey was timed to encompass. The pilots clearly scrutinised the porth before planning and developing their base here. Peraskin has an outstanding number of massive, tall, rounded rocks, some touching, others more dispersed. They are concentrated around the centre of the porth, rising from the inter-tidal zone of lesser boulders and the gravelly sand closer to the shore. The pilots laid out a drang system avoiding these unmoveable rocks, while linking sea and shore as directly as possible (Fig 16).

The drang here is unusual, splitting in two as it runs in through the boulders. The southern arm appears to branch off the other, although conceivably this might reflect negotiation of the larger rocks rather than relative chronology. A forking drang rather than two drangs was seemingly needed to serve two gig shed complexes here while minimising the work needed to negotiate the great spread and depth of mobile boulders in the porth and avoid its massive immobile ones.

Maintaining the drangs, as well as building them, was a major undertaking, and could be discontinued if sheds were disused. A rough layer of boulders now covers almost all of the southern part of the Peraskin system, which appears to have fallen out of use sooner (and may be early in origin, as noted above). On the shore above the head of it there is just one low earthwork of a gig shed surviving, too slight to be recognised by the Ordnance Survey in 1888 and only rediscovered recently (Greeves 2024) (shed 1 in Figs 12 and 14). In contrast, the north trackway, remaining quite clear today, was mapped in 1888 together with the sheds above it some of which were then still in use. It seems likely that each drang was maintained by the gig crew/s using it.

The pilots positioned their sheds at either side of the crescent of Peraskin, probably to get some protection against wind and sand blow from the slightly rising ground there, as well as to be close to the inner ends of the drangs. The drangs themselves

Fig 16 North side of the northern gig trackway or drang at Peraksin, St Agnes, at low water, showing massive rocks left in situ, boulders placed beside the rocks, and stones shifted by the sea some of which come from facing aligned with these. The people on the skyline – Mark Bowden at the plane table among them – are at the site of the sheds that housed gigs carried this way to and from the sea at low tide. (© Cornwall Archaeological Unit.)

would have been positioned with shelter for the sheds on the shore, as well as avoidance of massive boulders on the beach, in mind. In other places, where the mouth of a porth was less rocky and exposed, a series of drangs, rather than branching ones, could serve the different gig concerns. Where only one shared drang could be made, sheds were grouped near its head, so as not to concede time to rivals for reaching ships and gaining pilots' berths.

The landing at New Quay, St Mary's, is old, the time when it was 'new' being at least as long ago as the early eighteenth century. The place-name appears on a chart of 1735 by Johannes Van Keulen (Quixley and Quixley 2018, 97). The site is a strategic one, as it faces the eastern approach to Scilly, and offers a shorter crossing to St Martin's linking that island and 'up country' St Mary's with its land routes to and from Holy Vale and Old Town as well as Hugh Town. Pilots from St Mary's would need to return following their work, often arriving from the east (Troutbeck 1796, 100). They would have their flag flown on board ships, to signal to the gig to bring them ashore (Fraser Hicks, pers comm).

New Quay's arrangements of drang and gig sheds are highly adapted to the affordance of the shore here with its massive 'brow' as it is called on Scilly. The brow is a broad deep bank of boulders curving through the inter-tidal zone, sculpted by the sea, periodically shifting and accumulating. The drang at New Quay runs along near the shore through the brow before turning to seaward, so as to reduce the risk of boulders being swept up it directly from the open sea (Figs 8 and 17).

The earliest shed at New Quay was in a primary position fronting the head of the slipway that led on to the essential drang. The 1792 Graeme Spence survey depicts it, providing a rare early record of a gig shed site. It was rebuilt smaller, and the toe of its former footprint was used as part of the turning space for gigs housed in four or five further sheds built above it. Possibly this was after a storm wrecked the first shed and/or because funds gained from earlier working of a gig meant that operations could be expanded. Unlike those at many sites, the sheds were laid out at different angles making a rough fan. This layout was needed, on the rocky slope, to allow all sheds to address the head of the single slipway and long drang that formed the only viable way to use the brow.

In places gig sheds were placed close together despite being behind wider beaches now notable for expanses of sand. The grouping may be attributed to the beach having once been stonier so that the sheds had to share a drang since buried by natural deposition of sand. This may be seen at the sandy porths on St Martin's which had rows of sheds, at Lower Town Par and at Par Beach (also known as Higher Town Bay), where the 1888 OS map records drangs no longer visible and presumably covered in sand.

Drangs mapped in 1887–88, which the sea has since filled with boulders rather than sand, can still be seen on site where alignments of larger rocks mark the courses of their revetted sides. Excitingly, such drangs can point to remains above their inner ends of early gig sheds which had been eroded

Fig 17 'Brow' of boulders seaward of the gig sheds and slipway at New Quay with the drang running along its line before turning to meet the sea behind the photo viewpoint. (© Cornwall Archaeological Unit.)

away, or reduced to low earthworks, before the period of large-scale mapping. Both a boulder-choked drang and a part-eroded shed can be seen at Dropnose Porth on Gugh – for which see further the consideration of the human geography of Scilly several centuries ago (below, following the discussions of sea rocks and necks and of coastal change).

Rocks and necks

Accumulated and inherited knowledge of the rocks at sea, the channels or necks between them, and the actions on these of wind, wave and tide, enabled pilots to operate in the fluctuating conditions all around Scilly. Boat crews would even land on ledges, as recorded at the Seven Stones (some two miles west of which the Seven Stones' lightship was moored in 1841 before being moved closer). The Pollard rock there, at the north end of the Stones, showing at half-tide, had two boat rings for tying up to allow for fishing or salvaging work to be carried out from the reef (North 1850, 60).

Islets, rocks, reefs and ledges lying in or around porths were not a barrier to their use as bases for pilot gigs. Great Porth, Bryher, for instance, has Merrick Island in its mouth and the islets of Gweal and Castle Bryher flanking its approaches. The relatively small size and shallow draught of gigs meant that with local knowledge they could be navigated through the necks. Some rocks are known to have been modified to help identify them. Mincarlo, west of Samson (see Fig 29) had 'a stone set up on its fifty-foot peak as a navigation mark' (Grigson 1948, 61).

Rocks at sea with distinctive profiles, and carns or other features on land above the porths, could be aligned and used as guides to the orientation of drangs as well as natural necks and sounds. At Peraskin, St Agnes, the main line of the drang or trackway aligns with a mark on the skyline called the Old Woman's House (Harry Legg, pers comm). This mark protrudes from a ridged reef south of Annet, on Smith's Sound, a channel noted in the early nineteenth century as 'narrow and dangerous, and not to be ventured on but by a skilful pilot' despite its depth of 8 to 12 fathoms (Woodley 1822, 335). As seen from Peraskin the mark has an outline resembling, in its shape and proportions, a traditional Scillonian house in single-storey-and-loft style with a broad chimney at either end; the allusion may be an indication that the mark was so named long ago.

Coastal change

Impacts of coastal erosion, deposition of sand, and rising sea level, within the age of the gigs, can be seen in the archaeological record. The outer ends of the drangs at New Quay and at Peraskin were not fully uncovered at the extreme low tides of 2024. Those at Innisidgen were added in to the 'Porths and Gigs' survey schedule, thanks to the volunteers' helping complete work at the other sites. They were recorded just a few days after the period of the very lowest tides, and again were not fully exposed. This may mean that the tides have advanced considerably, with sea-level rise, during the active lifetime of the drangs.

Some gig sheds had their boat doors at the inland end, to avoid blown sand blocking doors or driving into shed interiors, as recalled by Alfred Trenear in relation to the former sheds on Thoroughfare at Town Beach, St Mary's, which he knew as a boy. This adaptation can be seen at several sites, including the shed of the *Swift* that survives behind the dunes at Green Porth, Tresco. The earthwork remains of the *Czar* house on Great Porth, Bryher, show another variation – the *Czar* shed is one of a few known to have had double doors at both ends, allowing for flexible use depending, presumably, on the weather and sea-state (Figs 10 and 18).

Complex impacts of sea-level rise and sand blow over time, within the age of the gigs, can be seen at St Martin's, near the landing place still in use (with a small modern pier) that served Lower Town, the island's western 'town' or hamlet of medieval origin. Here, as elsewhere on Scilly, archaeological recording over the past few decades has meant incidentally that aspects of coastal change can be revealed.

Remains on the shore there behind which the hotel now stands were found in 1987 by Cornish archaeologist Michael Tangye, who has pioneered the recording of coastal sites on Scilly. This is identifiable as a gig-shed from its size and by its open front end flanked by traces of walling that faced a lost edge of the land. It survives as footings of large stones, left stranded on the boulder beach when the sea washed out the ground (Fig 19). As Tangye notes, the shed measures 36 feet by up to 8 feet 6 inches within (11m by 2.6m). It is slightly boat-shaped in plan, and this and its greater size are consistent with its being comparatively early. It had come and gone before the mapping of 1888, which shows the shoreline a gig's length further out from that of today.

Czar shed, Great Porth, Bryher, Isles of Scilly

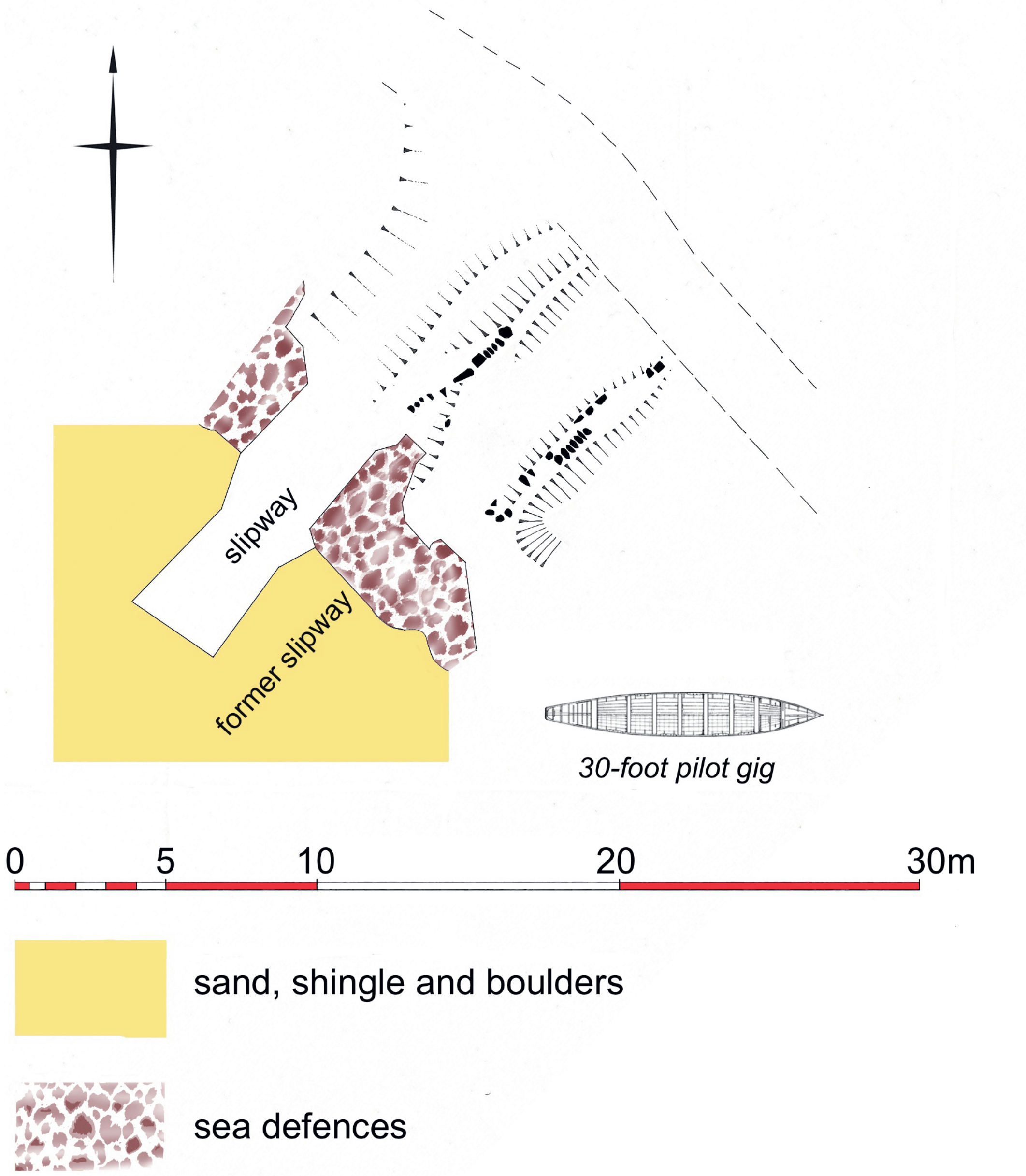

Fig 18 Plan of the earthworks of the original Czar shed at Great Porth, Bryher (also seen, still roofed, in Figure 10). Doors at either end with associated slipways in front and alongside could be used to carry the gig in or out. Survey lead and drawing: Mark Bowden; survey volunteer Layan Harman. (© Cornwall Archaeological Unit.)

Lower Town Par to the south beyond Bab's Carn had a row of gig sheds. These were possibly made in response to the loss of the early structures to the north found in 1987, although there are indications of early use of this more southerly shore too. A ruined harbour wall appears near Bab's Carn sometimes, when sand shifts away from on top of it, and it is marked on Spence's survey of 1792. As mentioned above in discussing drangs, the Par south of this quay was evidently stonier in the past, as it had a drang, which in turn meant the sheds had needed to be closely grouped.

The Lower Town Par sheds were still in repair in the mid-twentieth century (Fig 4). Since then, sand dunes have advanced further, burying the row of sheds. Sand blowing in and accumulating on a vast scale is recorded as one major cause of St Martin's having been abandoned before being re-populated in the seventeenth century (Borlase 1756, 23). It is probable that earlier gig shed sites have been lost to sand onslaughts too.

Fig 19 Lower Town, St Martin's, remains of base of gig shed on boulder beach scoured by the sea recorded by Michael Tangye in 1987. This view looks along the length of the site, edged by alignments of stones and now partly filled with sand, towards its open south end. (© Cornwall Archaeological Unit.)

Severe storms can sometimes strike Scilly with particular force due to the exposure of the islands in the open sea. Storm-fed seas could roll rocks huge enough to block drangs or combine with gale force winds to ruin buildings. Such events have been documented in some detail in the last century or so, as in 1926 when lightning struck St Martin's Grasshopper Island in a 'terrific' storm causing smoke to rise, and it was later found that a carn had been 'split into fragments' (*Cornishman* Wednesday 21 July 1926, p4). Storm events may have resulted in the ruin of some sheds. Gales could cause gigs to be capsized and crews to be drowned, and following such tragedies sheds might pass out of use, as was the case at Old Town (Sisam 1966).

In places, gig archaeology lies behind remains of compact harbours which may have been ruined by storms and/or overwhelmed by rising sea level or sand deposition. Some are post-medieval, or even medieval as suggested in the case of scheduled piers at Old Town, St Mary's (NHLE 1015656). Gig sheds probably worked in connection with built harbours can be seen for example at Old Quay, St Martin's. There, a slipway, that served several sheds surviving as ruins, curves down to the shore just behind the old pier (Fig 20). At Little Porth or Hole of Cove Vean, St Agnes, the stone revetments to the drang that served a pair of gig sheds (Fig 13) follow courses similar to those of small piers mapped there by Spence in 1792. The drang is unusually broad, so, in different generations, pilots may have maintained a small harbour, and then adapted its ruins as a drang.

Tracing the stories of the ancient harbour walls more closely is beyond the scope of this article. However, being to seaward of the gig shed complexes, their ruins evoke the heavy impacts from the advance of erosion and sea-level rise during the age of the gigs. They imply the importance of pilotage and the adaptability of the pilot crews that allowed landings to continue to be used for gigs despite the loss of the piers' arms holding off the waves.

Fig 20 Old Quay, St Martin's, with gig shed ruin in foreground and slipway just beyond that sloping down to the shore inside the old pier. (© Cornwall Archaeological Unit.)

Human geography of Scilly

The siting of pilot gig bases respected, and in turn helped structure, other patterns in the human geography of the islands, besides that of the small harbours that once lay within some of the porths (see above). The favouring of western coasts (or sites with ready access to these) for bases for pilotage, salvage and rescue has also been discussed above. This itself is of course partly cultural, determined by shipping roads rather than pure island coastal topography. Provision for gig bases connected more directly with patterns of fortification, habitation and also spiritual life on the islands can also be distinguished through the archaeology (Figs 29 and 30).

Deployment of some gigs may have been related to the siting of Scilly's former southern 'capital', Old Town on St Mary's. (The corresponding medieval 'central place' for the northern islands was St Nicholas' Priory on Tresco, held by the Abbey of Tavistock in Devon.) From around 1600 when Star Castle and St Mary's Quay were established, Old Town, with its stronghold of Ennor Castle on a rock outcrop and its small, planted harbour town below, was gradually eclipsed in importance by Hugh Town (Pounds 1984, 144). Hugh Town, or New Town as it was then sometimes called, became the main hub of the population, trade and administration of Scilly. Old Town's castle and harbour decayed but it remained a village-like centre supported by 'Fishing, Farming, selling Liquors, and the Exercise of a few mechanic Trades' (Heath 1750, 29).

Gigs sheds are recorded at the north-eastern corner of Old Town Bay, close behind the ruined quay and near the foot of the old market street aligned on the castle. There were probably gigs at Carn Leh on the west side of Old Town Bay where there is a trace of a slipway and a drang. This bay has several other drangs (besides kelping and/or seaweeding ways of the kind discussed in the conclusion, below). One runs straight to shore near the Church on the west, where there was a 'churchtown' hamlet; the 1792 Graeme Spence map indicates two dwellings besides a Parsonage.

In post-medieval times Old Town Church was still a spiritual centre for the islands. It had decayed greatly before 1796 but remained capacious, over 18m (60 feet) long, until it was truncated and partly rebuilt to form a reduced structure in mortuary chapel-style for the Dorrien-Smith family in 1891 (Troutbeck 1796, 59–65; Henderson 1960, 493). Its lost eastern part is visible in the churchyard as lower ground, the areas outside this having been effectively raised by burials from earlier times. After the dissolution of Tresco's Priory, before ministers were established in the off-islands, Scillonians brought their infants to the great old church for baptism by the chaplain of the Godolphins, who held the lease of Scilly. Families crossed to St Mary's 'many times at the risk of their lives' as Troutbeck says (*ibid*).

Fig 21 Part of the gig trackway or drang marked on the 1888 OS map at Dropnose Porth. The site is on the outer side of the tidal islet of Gugh that protrudes east from St Agnes. Across the sound is Peninnis Point on St Mary's; Old Town lies beyond that headland. (© Cornwall Archaeological Unit.)

The former importance of Old Town may also be a factor in the siting of a shed on another island. The 1888 OS map shows that Dropnose Porth, on the outer side of the Gugh, joined to St Agnes by a tidal bar, had a drang (or trackway as these features are called on St Agnes). The site has had massive boulders rolled on to it by the waves, but is still detectable (Fig 21). A hollow is visible in the low cliff at its head, and this is the width of a gig shed, although too short for one (Fig 22). It may be an early shed truncated by the sea. People on St Agnes today know of no tradition of a gig on Gugh. However, they consider that, in some circumstances and sea states, the place could have been good for using one, and that it would be the islands' best base for crossing to Old Town around Peninnis Head if that were necessary (Tristan Hick, pers comm). Securing access to the optimum route to St Mary's was important particularly since Agnes is an outlier among the inhabited off-islands, lying to the south west across the more open sea of St Mary's Sound.

Other early patterns may be seen on St Mary's in the deployment of gig sheds on the north east coast away from both Hugh Town and Old Town. This is likely to reflect the anciently-established pattern of rural dwellings being grouped in hamlets, and perhaps some lingering legacy of the primacy within that pattern of Holy Vale, St Mary's early central place both literally and in terms of status.

Fig 22 Hollow resembling the site of a gig shed truncated by coastal erosion at the head of the trackway or drang (the other end of which is seen in Figure 21) at Dropnose Porth, Gugh, St Agnes.(© Cornwall Archaeological Unit.)

As in Cornwall, the hamlets of medieval origin stood back from the coast for security from sea raiding, but had direct routes to the porths since these formed part of the economic base of the hamlet dwellers. This pattern is clear on the historic maps of Scilly, and visible on the ground. The gig-sized earthwork at Innisidgen, for example, aligned with a slipway and drang and resembling a long-ruined gig shed, has the hollow of a former pathway running to it from above (Fig 9). The 1887 map shows old routes connecting this site to Helvear and other hamlets inland.

The Innisidgen feature interpreted as a gig shed was apparently ruined well before 1887, as the Ordnance Survey did not notice it at that time. It may have gone before the mid-nineteenth century, when the processing and trade of kelp (seaweed growing in 'forests' offshore) had ceased to be so profitable and widely pursued on Scilly. The survey plan of the wider site at Innisidgen indicates that the drang had become the 'trunk' for laterally spreading 'branches' of ways for carrying the kelp up from the sea on pack animals (Fig 23). Kelp would then be spread to dry and burnt in stone-lined pits to make a cake rich in chemicals which was shipped for use in industry (Over 1987).

Finally, it is likely that the siting of gig sheds at porths on, or with access to, the west, noted at the head of this section, was influenced by the occurrence of fatal wrecks on a disastrous scale. In 1707 four ships-of-the-line from a homeward-bound British naval fleet were destroyed on the Western Rocks – including Sir Cloudesley Shovel's flagship the *Association* (now a Protected Wreck, NHLE 1419276). Over 1,600 lives were lost (Larn 1999, 25). It is possible that the use of Peraskin at the south-west edge of the inhabited land of St Agnes and of Scilly as a base for gigs may have some relation to the aftermath of these notorious wrecks.

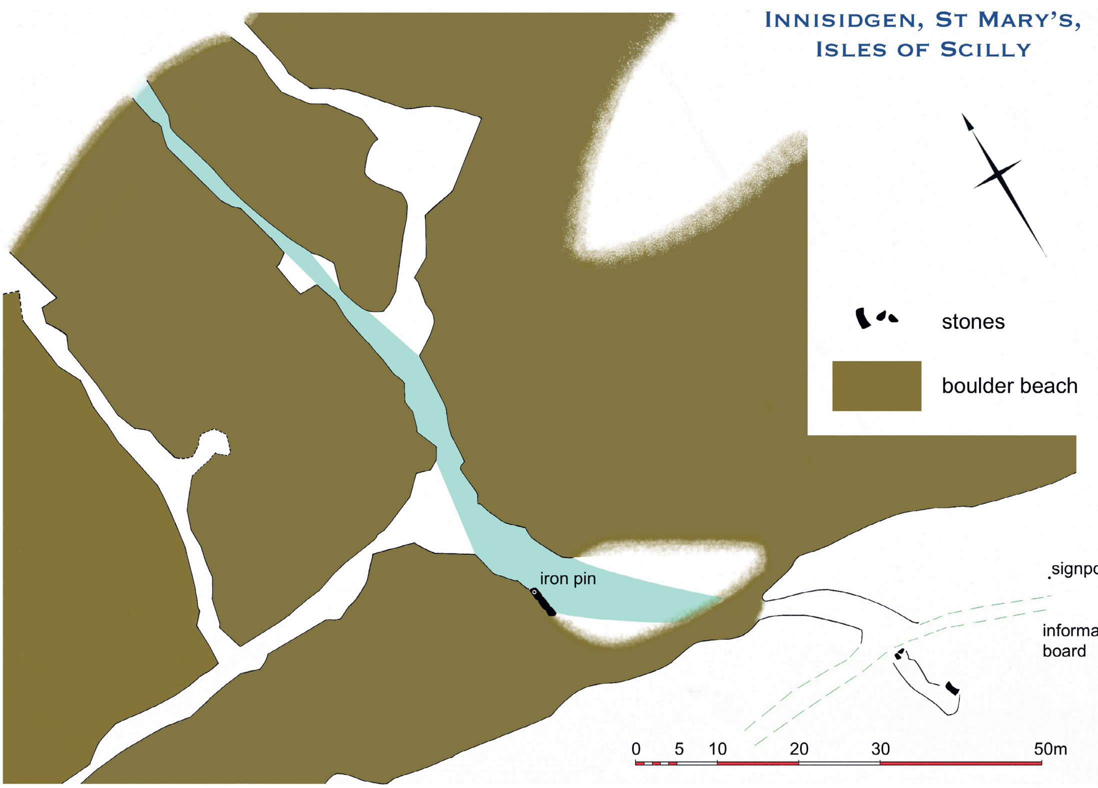

Fig 23 Plan of the inter-tidal ways at Innisidgen, St Mary's, together with the slipway to the beach and (lower right) the gig shed site above the coast path also shown in Figure 9. The sea-green shading indicates the primary line of the drang aligned with the slip. (© Cornwall Archaeological Unit.)

Zoning of gig sheds within the Hugh Town isthmus

Hugh Town grew organically from *c* 1600, close to the new fort of Star Castle and its pier (which was later rebuilt and extended). The shore of St Mary's Pool inside the quay, called Bank probably after the sand dunes that once lined this harbour, will have had gigs kept in sheds later lost in the course of further historic development there.

The town continued to grow eastward along the isthmus from the Hugh, the promontory hill later called the Garrison, that gave its name to the main street (Kirkham 2003, 17). A traveller visiting Scilly with the Duke of Tuscany in 1669 observed ships arriving at 'Grimsby Harbour' (presumably New Grimsby channel, since Bryher is referred to as being alongside). Many arrivals would signal with a gun for 'a boat or shallop' to be sent 'by the governor' with pilots to bring them in (Magalotti 1669, 95). 'Shallop' could mean (as well as a heavier ship) a smaller, long, shallow draught, clinker-built rowing boat with or without a sail similar to a gig (the Royal Museums Greenwich website presents an ornate royal river barge version, 19 feet long, with eight oars), so this may be an early reference to gigs based on St Mary's Pool under Star Castle, the Governor's residence.

Gigs formerly kept at Hugh Town make up a high proportion of those identified by name two generations ago when they were still in use in living memory (Jenkins 1975). As a result the 'Porth and Gigs' project has been able to map how Town Beach on the north of the isthmus was used for gigs serving the harbour and anchorage there, St Mary's Pool (as well as for pilot gigs based at the *Atlantic* and Rechabite slipways). Such sheds were concentrated around the back street by the shore, Thoroughfare, where agencies working with shipping had their premises (Fig 30).

The coastguards' gig *Topsy* was housed at their station now forming the Watch House apartments. Two gigs operated by shipping insurers, *Lloyd's Green* and *White*, may have been kept in a double shed on Thoroughfare, later redeveloped, as mentioned earlier. Remains of one of the sheds in this zone still survive in modified form, together with a gig-sized gateway to the beach, at the rear of Strand House (Fig 24). The Banfield family, who ran a shipping agency, had their office in the house, and used the shed for their gig *Palace* (Jenkins 1975, 67). The agency, and so the gig, worked on diverse shipping business, some involving international dealings; such as salvaging and underwriting and consulate services for several European countries (Larn and Banfield, 2013, 8–14). Provision for harbour and maritime work using gigs based in seafront back yards may have been more widespread in Hugh Town, as in Cornish ports such as Fowey where similar arrangements feature in the stories of Sir Arthur Quiller Couch ('Q') for example.

Porth Cressa on the south side of the isthmus, in contrast, was used mostly for gigs engaged in their typical work of pilotage, salvage, and smuggling; although *Lloyds' Black* was also based here, as was the *Mistletoe* used for pleasure trips (Jenkins 1975, 56, 60, 64, 67) – a role of particular interest as boat trips are central to the life and economy of the islands today. The use of this porth as a landing place

Fig 24 Access for a gig to Town Beach at the rear of Strand House where the Banfields had their shipping agency office, at Hugh Town, St Mary's. (© Cornwall Archaeological Unit.)

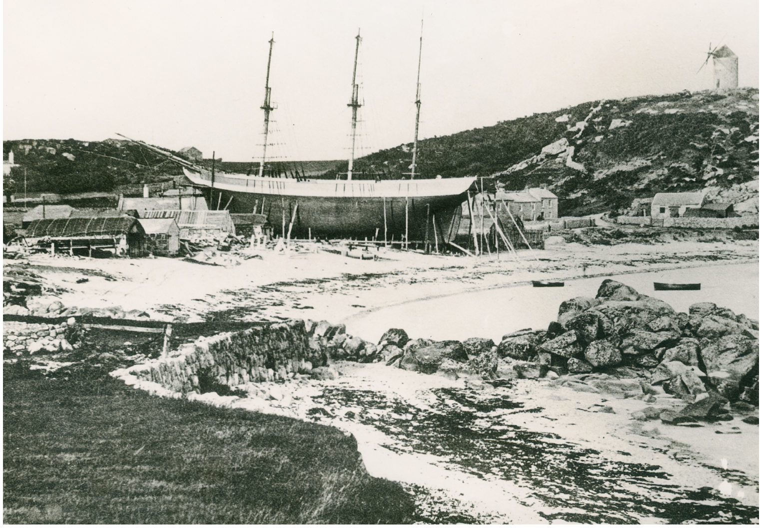

Fig 25 View of Porth Cressa at St Mary's in 1870 by Gibson, looking east from Little Carn, showing west of the shipbuilding site four gig sheds no longer standing, and east of the ship the Mistletoe shed also lost and the Dolly Varden shed still surviving. (Reproduced with kind permission © Isles of Scilly Museum, reference no. RN 05418.).

from the time of the foundation of Star Castle and Hugh Town can be seen in the landscape through the primary line of Silver Street (called Porcrasa Street on the map of 1862) that runs straight to its shore. Ten gig sheds are known to have stood here, although only the most easterly, that of the *Dolly Varden* (immediately west of the old fire station now a restaurant) still stands (see Fig 30, where sites represented include double sheds). The sheds' spacing allowed for the beaching, or, during the mid-nineteenth shipbuilding boom on Scilly, the construction, of merchant ships; as can be seen in a photograph of 1870, dated by Larn and Banfield (2013, 28) who identify the ship being readied for launch as the *David Auterson* (Fig 25).

Conclusion

Landscape archaeology and local knowledge together reveal how provision was made for gig pilotage on the Isles of Scilly for over 300 years, by adopting and adapting the affordances of the porths. Even shores exceptionally stony and shoal, like the rocky roughly hourglass-shaped inlet at Porth Hellick, St Mary's, could be developed as bases for pilotage where gig sheds were linked to the sea through the use of drangs to add to the natural necks.

More of the archaeology of landing places on Scilly could be investigated, notably on the islands now uninhabited which were not included in the 'Porths and Gigs' field visits. On the northern island of St Helen's, for example, the 1888 OS map seems to show two drangs (Fig 26). One ran straight towards the island's Pest House or quarantine station and well (NHLE 1016177). A bar to seaward of it may have been the site of a pier. The Pest House, still surviving although roofless, is recorded as having been built in 1772 after considerable delays *(Sherbourne Mercury*, 28 September 1772, p1). (The list entry description notes that it was established in 1764 after an Act 10 years earlier required any plague-ridden ship north of Cape Finisterre and heading for England to anchor in St Helen's Pool, south of the island). Another drang some 100m east, less clearly defined so perhaps earlier, appears to approach St Helen's ruined ecclesiastical complex of medieval origin. Did this serve the church there when it was a place of pilgrimage, Leland noting in the period of the Dissolution that 'yn tymes Past at her Sepulchre was gret Superstition' (Leland *c* 1540, 24)? Or was it made later to ship stone from the ruins for re-use elsewhere? The question of whether the drang was used for landing pilgrims raises another great question – were drangs made to unlock shores for navigation on Scilly even before the age when pilot gigs are known of here?

Across the islands as a whole, analysis of the layout and time depth of the drang and gig shed complexes reveals the Scillonians' large investment of time and labour as well as skill in pilotage, salvage and life-saving, and their success and

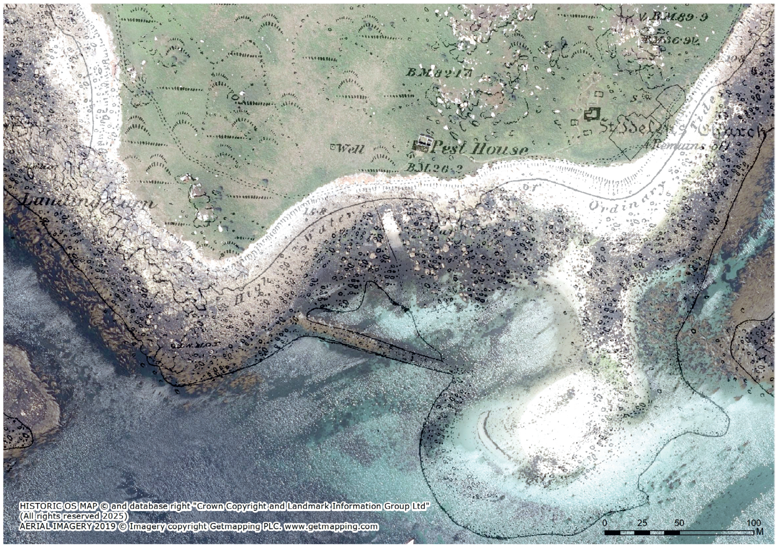

Fig 26 South side of the islet of St Helen's, as shown on the OS map of 1888 superimposed on the coloured air photo coverage of 2019. A drang in the centre of the image will have served the Pest House of 1772 above it. A broader drang appears to lie to its east below the church of medieval origin. (© Cornwall Archaeological Unit.)

rewards from this work. Porths with multiple gig sheds like Peraskin must have been busy centres of life at times despite being as distant from the 'towns' or hamlets as any points on their islands. Some bases for gigs appear to have attracted dwellings to them later in the age of the gigs when security from sea raiding was no longer a priority, like Great Porth on Bryher where the hamlet of Pool post-dates the Graeme Spence map of 1792.

At the shoreline sites or through the survey plans and models it is possible too to gain a strong sense of past perceptions of the landing places from which the gig crews worked to save ships, cargoes and lives, often at risk of their own lives. You can stand in the earthworks of a gig shed last used a century ago or more, on the ground or through the 3D models, and stride or sight down the route the crew took to reach the sea at low tide.

Some individual sheds are known to have housed gigs that were named after ships which their crews provided with pilotage, rescue, or salvage services. They reflect Scilly's association through this work to maritime commerce and military activity, new developments such as transatlantic steamers, and people and goods from all around the world. Several such links are explored in the project report (Parkes 2025). They include the connection with African history of Peraskin, the porth identified locally as having housed the old *Cetewayo* (Patrick Bird and Tristan Hick, pers comm), a gig renowned for its speed and named for a Zulu king (Jenkins 1975, 59).

Cetshwayo kaMpande, or Cetewayo, was King from 1872 of Zululand in present-day South Africa, defeated in a conflict widely seen as unjustly pursued by Britain (Blue Plaques website; English Heritage 2006). Cetewayo visited London for several weeks in 1882, gaining significant political support and great popularity (*ibid).* He arrived at Southampton on the steam packet *Arab*, that touched at Plymouth after a rough run from Madeira in a severe gale. People crowded to Plymouth to see him, a powerful figure sitting on deck, with his chiefs, wearing a pilot coat (*West Briton and Cornwall Advertiser*, 10 August 1882, p3; *Cornubian and Redruth Times* 11 August 1882, p4). He left from Plymouth, again in a gale, on another steamer, the *Nubian (op cit,* 8 September 1882, p6). Did pilots from St Ives (who commissioned the gig from Peters) or from Scilly (who bought and operated her) encounter the King on his voyage? The connection with St Agnes has been renewed, with the name *Cetewayo* being adopted for a new gig built for the island by Patrick Bird in 2024 (Fig 27).

The porths were not adapted and operated by the pilots in isolation. All were used for many other traditional purposes, including during the era of gig pilotage. These ranged from fishing, to sourcing sand to cover the clay floors of houses in sparkling white. They included kelping, and haulage of beach boulders for building stone; both requiring ways for pack or draught animals to pass through the

Fig 27 St Agnes women's crew racing in the 2025 World Pilot Gig Championships on the Isles of Scilly, in the Cetewayo. The gig, built by Patrick Bird in 2024, is named after a historic pilot gig, one of those once kept at the site recorded through survey and scanning at Peraskin, St Agnes. (Photograph: Charlotte Stevens, CPGA, reproduced with kind permission from them and from the boat crew.)

Fig 28 Rapid's Drang, Kitchen Porth, Bryher, with rock beside it (in front and to the right of the scale pole in this view) bearing splitting marks of seventeenth- or eighteenth-century type. (© Cornwall Archaeological Unit.)

inter-tidal boulder beds, much as pilotage required passages there for the gigs.

The evidence for a drang at Innisidgen becoming the trunk of a network of ways used later to harvest kelp and then (after kelping declined) to gather seaweed from the beach for manure has been noted above in the discussion of gigs and human geography. A boulder with stone splitting marks of the kind dating from *c* 1600–1800 lies alongside the southernmost of three drangs at Kitchen Porth, Bryher (Fig 28). This is the drang identified as that of the pilot cutter *Rapid* (Richard Jenkins, pers comm). The rock has been turned by the waves (the marks being underneath it) but probably not rolled far (being massive). It seems most likely to have been cut preparatory to parts of it being hauled away up the drang. The drang could then potentially be post-medieval, pre-dating the stationing here of the pilot cutter *Rapid* in the mid-nineteenth century that gave rise to its name.

In such ways, once they were in place in the rocky gateways of the porths, the drangs themselves transformed the affordances of the islands, helping Scillonians reach by gig their surrounding blue commons, the sea.

The maps below (Figs 29 and 30) show the location of main sites discussed. Full mapping of sites and other results can be found in CAU's 'Porths and Gigs of the Isles of Scilly' project report. The CAU report is downloadable free of charge via the website.

https://pyscajor.github.io/PorthsAndGigs/

A full colour printed version of the CAU report is also available. It can be ordered for supply by post at cost price by contacting CAU enquiries@cau.org.uk

Fig 29 'Porths and Gigs' mapping on air photo base showing sites of one or more historic gig sheds on Scilly, plotted as orange dots with red dots for those that are scheduled monuments; with added annotation of main places discussed in this article. The largest island is St Mary's; moving clockwise from there, the principal off-islands are St Agnes, Samson, Bryher, Tresco, and St Martin's. (© Cornwall Archaeological Unit.)

Fig 30 'Porths and Gigs' plot on air photo coverage of old gig shed sites in Hugh Town, St Mary's, shown as orange dots (some were double sheds). Names of associated gigs, known thanks to Alfred Jenkins' work of 1975, are added selectively, to help identify sheds mentioned in this article. (© Cornwall Archaeological Unit.)

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