

Iron Age Britain

John Taylor

External Relations 1

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Albion: the earliest history

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Introduction

The standard-bearer of the Tenth Legion, brandishing Rome's imperial eagle, leapt from his warship into the Kentish surf. "Follow me", he shouted to his comrades-in-arms. Caesar's invasion had started, and with it the traditional beginning of British history. Yet 300 years before the advent of Rome, while Alexander the Great was carving out a vast empire in the East, Pytheas, a voyager from the Greek colony of Massalia, anchored his ship off the Cornish coast, and produced the first documentary account of the most important source of tin in Europe.

These early written accounts exert a powerful influence on our perceptions, and induce us to think of the discovery of Britain from a Mediterranean point of view. Of course, we know that people had been migrating to our island since the ice sheets of the last glaciation began their retreat. Archaeology and recent research in human population genetics attest to this. However, since the ancient Britons were non-literate, we are compelled to rely on Greek and Roman reports for contemporary *historical* information about them.

The Iron Age is an absorbing period, because it stands at the interface of prehistory and history. It is occasionally referred to as proto-historic or text-aided, though some archaeologists see it as text-hindered. The division between prehistory and history is not an arbitrary one. Prehistory is the province of the archaeologist. Its primary focus is on material culture. History, on the other hand, is concerned with written testimony. As well as a different orientation, history and archaeology have inherently distinct limitations and discrete methodological difficulties. Only when one appreciates this is a coherent consideration of both kinds of evidence possible.

This is the first of an open-ended series of essays, which deal with various aspects of Iron Age Britain's interaction with the continent and the wider world of the Mediterranean. Some of these studies will be based on information gleaned from classical historical sources, others will focus on numismatic and archaeological evidence. These studies are revised and expanded sections of a doctoral thesis submitted to the Faculty of Anthropology and Geography, University of Oxford, which was submitted and defended in 1987. The thesis, entitled *Cross-channel relations in the late Iron Age: relations between Britain and the Continent during the La Tène period*, was supervised by Professor Sir Barry Cunliffe and Dr. Daphne Nash Bridges. It was examined by Professors Sheppard Frere and Martyn Jope.

The English Channel (*La Manche*)

On a clear day, with the naked eye, one can see across the Strait of Dover (*Pas-de-Calais*) to the opposite coast. Here, the English Channel is less than twenty-one miles (33.1 km) wide. Travelling westward, along its 350 mile (560 km) length, the Channel widens to about 112 miles (180 km) before it merges with the Atlantic Ocean. As we see it today, this waterway is largely the legacy of a rise in sea level caused by the melting ice sheets of the last glaciation (Flandrian Transgression). About 8,000 years ago, during the Mesolithic, the land between the continent and Britain was inundated.¹

The English Channel has long been seen as a bulwark against potential threats from the continent. It has had a profound effect in shaping British national identity,² reinforcing our sense of insularity and separateness. This is underscored by the recent decision to leave the European Union. Only a few years after the invasion-bent Spanish Armada sailed up the English

Channel, Shakespeare placed into the mouth of John of Gaunt this celebrated description of his island:

This fortress built by Nature for herself
Against infection and the hand of war,
This happy breed of men, this little world,
This precious stone set in the silver sea,
Which serves it in the office of a wall,
Or as a moat defensive to a house,
Against the envy of less happier lands,³

History reinforced the view of Fortress Britain, first against the armies of Napoleon and again during the Second World War. When the construction of a tunnel beneath the English Channel began in 1880, it was denounced as injurious to Britain's national defence. It certainly alarmed Oxford's Regius Professor of Modern History, Edward Augustus Freeman, who wrote the following in an article entitled *Alter Orbis*:

I am certainly set against the tunnel, not on military grounds, of which I am no judge, but from a fear that it may do something to lessen the insular character of Britain. I fear that it may do something to take from us, either in our own eyes or in the eyes of others, our ancient position as *alter orbis*, as a separate world of our own. ... Britain has been from the very beginning another world — *alter orbis* — a world which has been felt from the beginning to lie outside the general world of Europe, the world of Rome.⁴

Freeman, as we shall see, was repeating a conception that had captured the imagination of ancient Greeks and Romans.



However, the English Channel only became the barrier of modern perception after the Pale of Calais was lost by Mary I of England to the French in 1558. Calais had been ruled by England since 1347. It was the last vestige of the Angevin Empire on the continent. Before that, the English Channel had served to link the cross-Channel Angevin realms, as it had done earlier for William the Conqueror, and for Diviciacus, King of the Suessiones during the first century BC.

1. Angevin Empire

The Channel as a means of connectivity is of paramount importance to our study. Britain and *Gallia Comata* had no roads before their absorption into the Roman Empire. Overland routes were little more than ill-kept unsurfaced trackways, which were at the mercy of inclement weather. Therefore, even with their inherent dangers, riverine and maritime travel were preferable to the difficulties of a journey by land. This was especially the case where transportation of large quantities, or heavy goods, was involved. Commercially, sea transport was the cheapest form of conveyance, with a cost ratio of 1 (sea) to 5 (downriver), to 10 (upriver), to 52 (wagon).⁵ In antiquity, communities living near the coast or on major rivers had an economic and developmental advantage over those who did not.

The Britons of the Iron Age were a vital society, not the rude savages of antiquarian fancy. The first written references to them, like a photograph, freeze a moment in time, and the communities we encounter are outward-looking, engaged in long-distance trade, and politically astute, with cross-channel diplomatic ties. The English Channel was not a barrier but an avenue of commerce and communication. Archaeology attests to the fact that the material culture of southern Britain was closer to that of northern Gaul than it was to that of northern Britain.

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Britain: From Myth to Reality

The Atlantic Ocean was a dangerous place, and regarded with apprehension. There were rumours of monsters, treacherously shallow waters and impassable seaweed.⁶ Mystifying tides caused disquiet at a time when there were few navigational aids. By the seventh century BC, Greek seafarers had steered their wooden ships to the western limits of the Mediterranean, but only the intrepid few ventured beyond the Pillars of Hercules. One early voyager, Kolaios of Samos, was blown off course, through the Strait of Gibraltar, but he was fortunate, and returned home with a king's ransom in silver from the mines of Spanish Tartessus.⁷ The shadowy Midacritus, in his search for a precious cargo, was the first to import tin from the elusive Island of Cassiteris⁸. During the 6th century BC, Euthymenes, of the Phocaeen colony of Massalia, explored the north-western coast of Africa to find a river filled with crocodiles and hippopotami.⁹ Around the same time, trailblazing Phoenicians, like Hanno and Himilco, were equally daring in their quests to seize whatever trading opportunities the potentially perilous waters of Oceanus might offer.

The Atlantic was also a mysterious place. Somewhere in its uncharted waters lay the mighty island of Atlantis, whose armies had been sent to conquer Europe nine thousand years before the time of Plato.¹⁰ Hideous Gorgons lived on a nearby island, and beyond them were the Hesperides,

home to the Nymphs of the Setting Sun, who guarded a tree of golden apples.¹¹ Elsewhere in the encircling waters, the Isles of the Blessed served as a limbo for fallen heroes and the entrance to the dismal realm of Hades.¹² There were stories of an island inhabited by lusty satyrs,¹³ and reports of a continent so great that its rivers silted up the ocean.¹⁴

The tale of one exotic stranger, overheard in Carthage, described an island near Britain that served as the prison of Kronos, and housed his warder, the hundred-armed monster, Briareus.¹⁵ Demetrius of Tarsus, a schoolmaster on the staff of Agricola, was aware of this island, and during a voyage of exploration, he identified it as one of the Western Isles of Scotland.¹⁶ Britain, as part of this mythical sphere, was seen as *another world*, beyond the pale and alien.¹⁷ Understandably, the campaigns of Julius Caesar against the Britons were regarded as wondrously heroic. Plutarch describes him as “the first person to launch an expedition on the Western Ocean, and to sail over the Atlantic with his army to fight.”¹⁸ It was a daring and audacious exploit, but one the legions of Caligula and Claudius were not keen to emulate. The idea of being sent on a war of conquest outside of the limits of civilization caused them to mutiny.¹⁹

Seafaring, though fraught with danger, was still the principal means of conveyance, exploration and colonization in antiquity. It was far superior to overland travel, which could be equally hazardous, and comparatively slow and arduous. For this reason, Greek and Phoenician colonies in the Mediterranean Basin were invariably situated on the coast. Beyond this narrow coastal zone, the interior of Europe was largely *terra incognita*, and remained so for centuries. Writers filled the blank hinterland with one-eyed Arimaspians, gold-guarding griffins and the imaginary Rhipaeian Mountains. The dimly perceived far North was said to be inhabited by Hyperboreans, and only the slow progress of rational geography eventually displaced them.²⁰ Hecateus of Miletus, (*fl.* 520-500 BC) is the first extant source to mention the Celts, but only in the context of the coastal emporia of Narbo and Massalia.²¹ Herodotus, writing in the fifth century BC, had a very sketchy picture of the European mainland.²² He had heard that tin and amber came from the “farthest western parts of Europe”, but, by his own admission, he knew nothing of this region.²³

It was not until the mid-fourth century BC that the British Isles came to the notice of the Classical world, when the bold and enterprising voyager,

Pytheas of Massalia, sailed into the Atlantic, surveyed the western coast of Europe, and circumnavigated the largest island in the British archipelago.²⁴ Unfortunately, his voyage was a singular event, and remained unsubstantiated until Julius Caesar landed his army on the beaches of Kent three hundred years later. Sadly, much of what Pytheas reported was considered so unbelievable that it was largely rejected. As a result, Britain became the focus of speculation. There were writers who denied its very existence, declaring it nothing more than a fairy tale.²⁵ Some scholars regarded it as a distinct continent, while others saw it as an island of unbelievable size. This lack of reliable first-hand information about Britain caused Tacitus to remark that earlier writers had “embroidered with fine language a theme still legendary”.²⁶ Dio aptly sums up the situation in the following passage.²⁷

“To the very earliest of the Greeks and Romans it was not even known to exist, while to their descendants it was a matter of dispute whether it was a continent or an island; and accounts were written from both points of view by many who knew nothing about it, because they had not seen it with their own eyes ... but indulged in surmises according to scholarly sect or branch of learning to which they belonged.”

In AD 83, Agricola, the Roman governor of Britain, ordered the circumnavigation of the island and established the extent of its insularity.²⁸ Finally, Pytheas was vindicated, and the rhetorical debate put to rest.

The Ora Maritima and the Massiliote Periplus

The *Ora Maritima* (*On the Seacoast*) is a late fourth century AD poem composed by Rufus Festus Avienus. Only the first 714 lines of the work survive.²⁹ These describe the Atlantic and Mediterranean coastlines from Brittany to Marseilles. It is written in a pretentiously archaic style in imitation of an early Greek *periplus*.³⁰ The poem itself has little artistic merit, and has been described as a ‘rewarmed potpourri of old Greek sailing manuals’.³¹ However, this is precisely where its value lies, in the incorporation of material drawn from early sources that are no longer extant, and since Avienus delights in the use of ancient nomenclature, he fortuitously provides a catalogue of place and tribal names not otherwise documented.

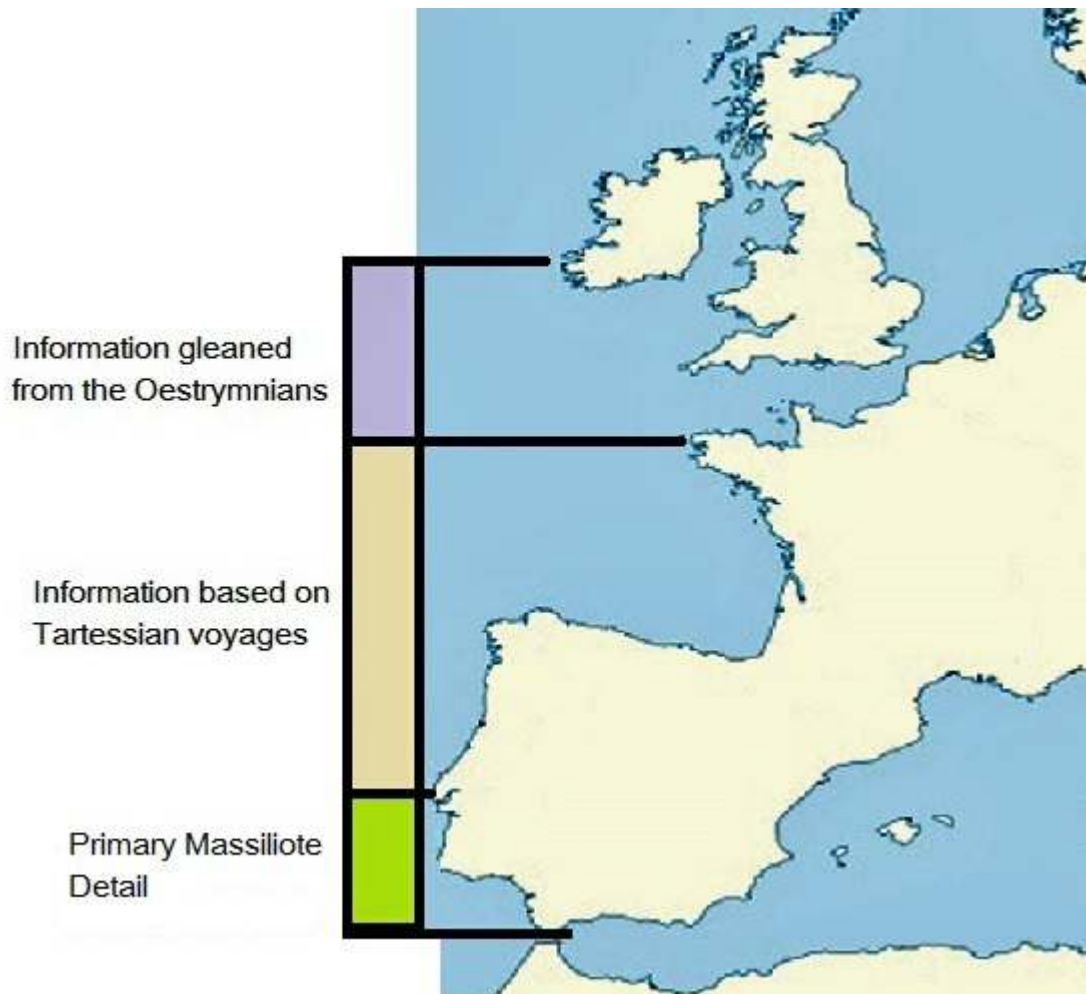


2. Place names in Schulten's *Massiliote Periplus*

The German historian and archaeologist, Adolf Schulten, made the first serious study of the *Ora Maritima*.³² He proposed that Avienus had versified a sixth century BC Greek sailing manual, which has become known as the *Massiliote Periplus*. It was identified as Massiliote in origin, because nearly eighty lines of text are devoted to Massalia and the Rhone River.³³ In addition, the stretch of coastline lying immediately to the west of the city is described in richer detail than shores situated further away. Schulten maintained that the *Massiliote Periplus* was written about 530 BC, because its place-names are archaic. He also believed that Greek knowledge of the Atlantic coast of Europe must have been obtained prior to about 500 BC, because at this time Carthage closed the Strait of Gibraltar to foreign shipping. This, he argued, prevented Greek trade with the Tartessians, who inhabited the Guadalquivir region of south-western Spain. He further concluded that the *periplus* was written before the foundation of the Massiliote colonies of Emporion and Rhode, because they are not mentioned by Avienus.³⁴ If Schulten's analysis is correct, his *Massiliote Periplus*, abstracted in the verse of the *Ora Maritima*, contains the earliest reference to the British Isles. The relevant lines are quoted below.

Here lies a promontory named in former times *Oestrymnis* ...
Beneath the height of this promontory there opens out for the inhabitants the *sinus Oestrymnicus*, in which lie the Oestrymnides Islands, widely spaced and rich in tin and lead. Great is the strength of this race, proud their spirit, skilful their art, and constantly concerned with commerce. In their woven boats, they ply the rough sea far and wide and the abyss of Ocean, full of monsters. These men do not know how to build keels of pine and maple, nor do they fashion their boats, as is the custom, from fir trees. Rather, they marvellously always fit out their boats with hides joined together, and often traverse the wide sea on skins. But from here it is two days' journey by ship to the sacred isle (*sacra insula*), as the ancients called it. This spreads its broad fields among the waves and far and wide the race of *Hierni* (*gens Hiernorum*) inhabit it. Again, the island of the Albiones (*insula Albionum*) lies near. The Tartessians were accustomed to trade as far as the bounds of the Oestrymnides, and the colonists of Carthage and the people dwelling near the Pillars of Hercules went to these seas.³⁵

Schulten identifies *Sacra insula*³⁶ and *insula Albionum* as Ireland and Britain respectively. *Oestrymnis* is equated with Pointe du Raz, while the Oestrymnides are islands located off the west coast of Brittany. Schulten further asserted that the author of the *Massiliote Periplus* had sailed only as far north as the Tagus River (Lisbon), because detailed description of the coastline ceases there. The Tagus is also the last place bearing a Greek name, *Ophiussa*.³⁷ He argued that information about the coast north of the Tagus was obtained second-hand from the Tartessians, who traded in those waters (*Ora Maritima* 113). He went on to suggest that they, in turn, obtained their knowledge of Ireland and Britain from the inhabitants of the Oestrymnides. Thus, we are presented with a three-tiered structure of sources for information on the Atlantic coast: a primary Massiliote, with secondary Tartessian and tertiary Oestrymnian reports.



3. Schulten's proposed scheme of sources

Hawkes,³⁸ agreed with Schulten's assessment of Avienus' sources, but decided that the sailing times described in *Ora Maritima* were too short for Schulten's geographical attributions, especially the two-days sail from Brittany to Ireland. Therefore, he proposed that the *Massiliote Periplus* need fit nothing north of the Tagus, precisely the point where 'Mediterranean finds begin to peter out'. In order to make his scheme work, Hawkes put forward a new set of modern equivalents for the place-names in the *Ora Maritima*. The Oestrymnides became tin-rich Galicia, to which the Tartessians sailed in currachs for lead and tin (*Ora Maritima* 95-107), and Albion and the "sacred isle" were located off the Iberian coast of Pontevedra. This reconstruction is unconvincing.

Schulten's identification of Albion with Britain was based on classical testimony.³⁹ In the sixth century AD, Stephanus of Byzantium mentions Albion as a Pretannic island. He names Marcian (c. AD 400) as his source. Marcian's *Periplus Mari Exteri* names the two Prettanic islands as Albion and Ivernia. He also wrote two *periploi*, one on the Prettanic Island of Alvion and the other on the Prettanic Island of Ivernia. According to Pseudo-Agathemerus, writing sometime after the second century AD, the two *Bretanikaei* are Alvion and Iverni.⁴⁰ The author of *De Mundo*,⁴¹ referred to as Pseudo-Aristotle, and writing probably about 40-20 BC, calls the Brettanic Islands, Albion and Ierne. Ptolemy (*Geographia circa* AD 121-151) also refers to the British Isles as Alvion and Iverni.⁴² Pliny⁴³ (AD 23-79) also equates Albion with Britain, but a few lines later,⁴⁴ he mentions *Albiones* in an Iberian context.⁴⁵ Hawkes capitalized on this single reference, and used it to support his hypothesis for a *periplus* limited to Iberia. He explained away the testimony of classical authors linking Albion with Britain by claiming that Ephorus, writing in the mid-fifth century BC, had mistakenly distorted the geography of the *Massiliote Periplus* northward.⁴⁶ He proceeded to claim that Ephorus was responsible for introducing Brittany and the British Isles into the equation, and that later authors erroneously followed his lead. Hawkes placed Ephorus in Massalia, where he was supposed to have learned about the British Isles from Celtic merchants involved in the overland tin trade. So, according to Hawkes' thesis, Albion made its debut into the historical record in the mid-fifth century BC, and not in the sixth century as proposed by Schulten.

Actually, there is no evidence that Ephorus was ever in Massalia. He was born in Cyme, Asia Minor, was a pupil of Isocrates and had a son,

Demophilus. Apart from these facts, not a single detail of his life is known.⁴⁷ Ephorus certainly described the geography of Europe in Book IV of his *History*, but only a few relevant passages survive.⁴⁸ From these fragments, it is clear that Ephorus knew of Tartessians and Celts, and had some small knowledge of the south coast of Iberia, namely Baetica and Gades, but the information he imparts is scanty and of limited use in reconstructing the known geography of the period.⁴⁹ Regarding Albion, the *Hierni*, the Oestrymnides and tin-traders, Ephorus is silent. Furthermore, in using sailing distances to support his hypothesis, Hawkes failed to consider that estimates of maritime distances were generally erroneous in antiquity, due to the lack of adequate navigational instruments.⁵⁰ Coupled with Avienus' poetic licence and the technical constraints of his senarian metre, it is unprofitable to place much weight on the sailing times cited in the *Ora Maritima*.

In 1934, Berthelot published a French commentary and translation of the *Ora Maritima*. He completely rejected the idea of a Massiliote *periplus*, and described Schulten's reconstruction of Avienus' sources as *laborieuses fictions*. Berthelot acknowledged Avienus' eclectic approach, and saw no reason to doubt the poet's own declaration that he had "joined many things taken from numerous commentaries".⁵¹ Carpenter went even further in rejecting Schulten's thesis by asserting that Pytheas was the principal source of the surviving section of the *Ora Maritima*, even though Avienus does not mention him by name.⁵² Pytheas, of course, is extremely well placed. After all, Massalia was his homeport, and he had sailed the entire route described in the poem. Fortunately, Avienus leaves a clue. He mentions a route across Iberia, from the Atlantic coast to the Sardinian Sea, which took seven days to cross on foot.⁵³ This is surely a reference to Pytheas' discovery that traversing the northerly part of Iberia on foot is an easier (shorter) journey than sailing around the entire peninsula.⁵⁴ On embarking on his voyage of exploration, Pytheas sailed from Massalia, and presumably coasted along the Mediterranean seaboard of France and Iberia, sailed through the Pillars of Hercules, and then proceeded northward up the Atlantic coast of Europe. He circumnavigated Britain, visited an island called Thule, and explored at least one source of continental amber. His exploits were published around the middle of the fourth century BC, in a treatise entitled *On the Ocean*. Only fragments of this work are extant, though it is certain that it survived, either as a copy or as an epitome, well beyond Avienus' day.⁵⁵ It seems likely that Avienus used an epitome of Pytheas' text as the basis for the extant portion

of the *Ora Maritima*, and then added material from other early sources in order to give his work an antique flavour.⁵⁶

Pytheas was intimately familiar with Massalia, its environs and adjacent coastline, so there is no reason to look to an imaginary *Massiliote* periplus. Schulten's succession of sources (Massiliote-Tartessian-Oestrymnia) is rejected in favour of Pytheas, whose knowledge of the region was first-hand. A sixth century BC date, based on the closure of the Straits of Gibraltar by Carthage, and the absence of Emporion and Rhode from the catalogue of sites mentioned by Avienus, is called into question. Hind has argued that the city of Pyrene, mentioned in the *Ora Maritima*, was actually Emporion (modern Ampurias).⁵⁷ Moreover, the existence of an effective, centuries-long, Punic blockade is debatable,⁵⁸ and difficult to accept.⁵⁹ Furthermore, it is hard to fit a sixth century BC work, which mentions the British Isles, into a convincing historical context. Some scholars have looked to the following extract from Diodorus Siculus as support for such an early date.

“Hecataeus and certain others say that in the regions beyond the land of the Celts (Gaul) there lies in the Ocean an island no smaller than Sicily. This island, the account continues, is situated in the North and is inhabited by Hyperboreans, ... and the island is both fertile and productive of every crop, and since it has an unusually temperate climate, it produces two harvests each year ... And there is also on the island both a magnificent sacred precinct to Apollo and a notable temple which is adorned with many votive offerings and is spherical in shape.”⁶⁰

It is easy to think that Hecataeus is describing Britain.⁶¹ It may be significant that the abovementioned island is compared to Sicily, particularly in the light of Diodorus' statement that “Britain is triangular in shape very much as is Sicily”.⁶² Britain also has a temperate climate⁶³, and it was also capable of producing two harvests per year.⁶⁴ Hennig thought that Hecataeus was referring to Britain, and suggested that the “notable temple of spherical shape” was Stonehenge.⁶⁵ However, those who date this passage to the sixth century BC have misidentified Diodorus' source as Hecataeus of Miletus (fl. 520-500 BC).⁶⁶ Actually, the author is Hecataeus of Abdera (ca. 315-285 BC),⁶⁷ who wrote a work entitled *Concerning the Hyperboreans*.⁶⁸ This work is cast in the form of an extraordinary voyage. Unbelievable aspects of the myth are downplayed, while enough plausible geographical, meteorological

and astronomical details are added to lend an air of authenticity to the tale.⁶⁹ Though uncertain, it is probable, that Hecataeus of Abdera used Pytheas, a contemporary, as his source.⁷⁰ Certainly during the sixth and fifth centuries BC, scant information is recorded about the Atlantic West. From what we can gather from the fragments available, Hecataeus of Miletus knew nothing of the region.⁷¹ Herodotus had heard of Gades⁷² and the Tin Islands, but little else. Pseudo-Scylax (ca. 350 BC) mentions only Gades and other Carthaginian trading stations, along with Atlantic tides.⁷³ His contemporaries, Aristotle and Ephorus, were equally sketchy, if not, at times, erroneous, about the geography of Western Europe.⁷⁴ Even as late as the third century BC, knowledge of Celtic Europe was minimal.⁷⁵

Unencumbered by the notion of a sixth-century BC *periplus*, certain observations can be made. It is known that Pytheas called the inhabitants of Finistère, *Ostim[n]ioi*,⁷⁶ a name seen in the *Ora Maritima* as *Oestrymni*.⁷⁷ Lasserre concluded that Pytheas either borrowed this name from an older geography, or came upon it personally on the Breton coast.⁷⁸ Since our argument discounts a source older than Pytheas, the latter option is endorsed. Pytheas is also credited with recording the ethnic designation, **Pritani*.⁷⁹ This was evidently rendered into Greek as *Prettanoi* (Πρεττανοί), which referred to the inhabitants of the British Isles. He most likely acquired the name from the inhabitants of Armorica, who used it to refer to anyone from the British islands. It seems improbable that the islanders would have had a collective name for themselves, presumably being organized into distinct clans or tribes. The passage that links this ethnonym to Pytheas is:

“However, the Massiliote Pytheas says that the very last regions are those around Thule, the most northern of the *Prettanides* by sea...”⁸⁰

Here *Prettanides* is used as a collective term, which refers to the entire ‘British’ archipelago. This is certainly the sense found in Polybius, our earliest extant reference to the ethnonym. He refers to *Brettannikai nesoi*, which means the British Isles or islands of the *Prettanoi*.⁸¹ Within the collective *Prettanides*, specific islands are named individually. We have just seen that Thule was a Prettanic island, and there is ample evidence cited above to show that Ierne and Albion were also Prettanic. Similarly, the Aebudae are described as Prettanic islands.⁸² This situation is analogous to the Hawaiian Islands, a name based on an ethnonym and collective in nature. Within this

Polynesian archipelago specific islands have individual names. By the time of Diodorus Siculus and Strabo the term Prettaniké (Πρεττανική) had developed into a kind of short-hand designation for Britain, much the same way as people today use ‘Hawaii’ as a generic locator. *Prettaniké* became *Brettaniké* under the influence of Latin pronunciation.⁸³ According to Eustathius, the *P*- version is the older form and usually spelled with *-tt*-, though constraints of metre sometimes render it with one *-t*.⁸⁴ Probably, the *P*- form was more common than extant texts suggest, being corrected to *B*- by later scribes trained in Latin.⁸⁵ This seems likely in the case of Strabo, where both forms occur.⁸⁶ The passage cited above marks a shift in spelling, within Strabo’s text, from *Brettaniké* to the older *P*- form, which suggests that we are seeing Pytheas’ original spelling.⁸⁷ The *P*- version also occurs in Diodorus, Marcian and Ptolemy.

In addition to Thule, it seems likely that Pytheas was responsible for first recording the names *lerne* and *Albion*. The place-name, *Albion*, was once thought to derive from the Latin *albus* (white), denoting Britain as the ‘white country’ in reference to the chalk cliffs of Kent.⁸⁸ However, linguists now consider it to be Celtic, derived from the British stem **albio-* or *albiu* (genitive **albionos*), meaning ‘world’ or ‘land’.⁸⁹ We can imagine that the indigenous Britons described their country as ‘Our Land’. ‘*lerne*’ is also Celtic, and relates to the ethnonym, *Īvernī*, meaning ‘People of the Fertile Land’.⁹⁰ Those who have followed Schulten’s scheme have been led to assume that *Albion* and *lerne* are older than Pytheas’ *Prettanides*.⁹¹ For example, Cary and Warmington regarded *Albion* as a pre-Celtic term “driven out of use by the Celtic *Britannia*”.⁹² This line of reasoning is based on the appearance of *Albion* and *lerne* in the *Ora Maritima*, which is imagined to be the versification of a sixth century BC periplus.

The earliest extant references to *Albion* and *lerne*, outlined below, are between 40 BC and AD 75.

Pseudo-Aristotle (*De Mundo* 3.393b): “There are very large islands, two in number, called the Brettanic islands, *Albion* and *lerne*

Pliny (*NH* 4.16.102): “It was itself named *Albion*, while all the islands about which we shall soon briefly speak were called the Britains (*Britanniae*)

Here we see clearly that the nominal relationship is geographical and carries no chronological implication. The group is Prettanic, the individual islands are Albion and Ierne. Diodorus Siculus and Strabo do not mention Albion, but the former uses *Iris* for Ireland,⁹³ and the latter maintains the more orthodox Ierne. Caesar and Pliny both use the standard Latin form, *Hibernia*, and Mela employs *Iuverna*. Rivet and Smith remarked that to judge from the reference in Pliny, the term 'Albion' was already an archaism in the first century AD.⁹⁴ Accordingly, it must have been even more of an anachronism for Ptolemy, writing in the second century. *Ivernia* and *Alvion* occur in his *Geography* with other equally out-of-date nomenclature: Belerion, Orkades, and Kantion. These latter place-names are almost certainly the terms employed by Pytheas, and refer to Cornwall, the Orkneys and Kent respectively.⁹⁵ In antiquity, they formed the basis for the perception that Britain was triangular in shape.⁹⁶

One of Avienus' sources mentions the Punic navigator, Himilco, implying Carthaginian activity in the Atlantic.⁹⁷ The only other source to name him is Pliny.⁹⁸ He writes:

Also when the power of Carthage flourished, Hanno sailed from Cadiz to the extremity of Arabia [Africa] and published a memoir of his voyage, as did Himilco when dispatched at the same date to explore the outer coasts of Europe.

This passage is important in fixing the contemporaneity of Hanno and Himilco, and in establishing their respective spheres of action. It has been argued that Hanno's voyage took place sometime in the mid-fifth century BC,⁹⁹ thus placing Himilco's voyage about a century earlier than Pytheas. Exactly where Himilco went is not known, but it seems likely he explored the Atlantic coasts of Spain and France as far as Brittany.¹⁰⁰ It is uncertain whether or not he visited the British Isles, though some scholars have tentatively suggested that he was the source for the toponym, Albion.¹⁰¹ The passages relating to Himilco are full of hair-raising tales of impassable seas, inhabited by monsters, which were probably designed to discourage competitors.

To summarize, the *Ora Maritima* is an agglomeration of sources. Apart from Hecataeus of Miletus, none antedate the fifth century BC. While earlier

Greek activity in southern Spain is attested in the archaeological record,¹⁰² the idea of a sixth-century BC historical source containing information on the British Isles is rejected. Schulten's *Massiliote Periplus* is an unsubstantiated construct. The account of Pytheas of Massalia represents the core of the poem, to which information gleaned from other writers has been appended.

Pytheas and the Tin Trade

The attention of the Greek world was focused on the East as Alexander the Great carved out an empire that reached from Pella to the Punjab. In the wake of his conquests came an enormous expansion of the geographical knowledge of Asia. The West, however, enjoyed no such counterpart, and its geography remained obscure. Nevertheless, at about the beginning of the Hellenistic Period, the Massiliote explorer, Pytheas, revealed to his contemporaries a region previously unrecorded. Sailing northwards along the western coasts of Iberia and Gaul, he proceeded to circumnavigate Britain, mentioned an island called Thule,¹⁰³ and apparently visited the North Sea littoral of Denmark and Germany. Naturally, his endeavour was limited to the Atlantic seaboard, which left the interior of Europe largely uncharted until the advent of Rome.¹⁰⁴

Pytheas has been described as the “most important source for the knowledge of the West in classical antiquity before the birth of Christ”.¹⁰⁵ His work placed the British Isles firmly on the map, and substantiated earlier rumours of tin and amber in the West. Unfortunately, the account of his voyage does not survive, and few details of his journey remain.¹⁰⁶ However, eighteen classical authors are known to have quoted him,¹⁰⁷ though many of them survive only as fragments. Our most important source on Pytheas is Strabo. Paradoxically, he is critical and hostile.¹⁰⁸ Pytheas' empirical approach and astronomical observations were incompatible with Strabo's philosophical framework and methodology.¹⁰⁹ Moreover, Pytheas had no immediate successor to corroborate his discoveries, and so was scorned in antiquity and branded a liar.

Several motives for Pytheas' expedition have been suggested. Broche thought it was designed to enhance Massalia's prestige, as a counterpart to Alexander's exploits in Asia,¹¹⁰ but this seems unlikely. Hyde remarked:

“Pytheas’ main object must have been scientific, the desire to explore unknown seas and lands; although commerce, especially in tin, may have been a secondary motive”.¹¹¹ Actually, the inverse is probably true. Commerce was the prime motivation for the venture. Trade was the life’s blood of Massalia, both in the Mediterranean and with its Celtic hinterland. Admittedly, Pytheas was an accomplished mathematician and astronomer. His treatise, *On the Ocean*, has been described as a “work of observed data”, with the emphasis on collection, rather than on the formulation of theories.¹¹² Undoubtedly, his scientific skill was a requisite consequence of the practicalities of maritime navigation.¹¹³

About 150 BC, Polybius explored the Atlantic coasts of Africa and Portugal in a fleet of ships provided by his patron, Scipio Aemilianus.¹¹⁴ Anxious to appear as a trailblazer, he ridiculed the accomplishments of Pytheas, and denounced him as a fraud.¹¹⁵ Aware of the costs involved in mounting such an expedition, Polybius gibed that Pytheas had been too poor to undertake his venture.¹¹⁶ The truth may be that a consortium of merchants or the city fathers of Massalia funded Pytheas to undertake commercial reconnaissance.

It has been suggested that the principal motive for Pytheas’ voyage was to break the Carthaginian monopoly on Atlantic trade.¹¹⁷ That such a monopoly existed at this time is questionable. Tin, at least, was coming to Massalia and Narbo by an overland route, and conducted under the auspices of Gallic traders. When Pytheas arrived at the sources of tin and amber, the testimonia imply that trade in these commodities was already established.¹¹⁸ This, of course, begs the question: if supplies of tin and amber had been coming overland, why did Massalia decide to explore an alternative sea route? The answer lies not with competition from Carthage or attempts to cut out Celtic middlemen, but with turbulence in Gaul. Pytheas’ expedition, which took place during the middle of the fourth century BC,¹¹⁹ coincides with the period of Celtic migration. In archaeological terms, this falls within Hatt’s *La Tène Ancien II* (400-250 BC)¹²⁰, a period marked by circumstances that suggest profound socio-economic changes within Celtic Europe.¹²¹ It is axiomatic that trade flourishes under peaceful conditions. The effects of economic dislocation and migration, which marked this period, no doubt destabilized trading systems across Gaul. As a result, overland deliveries of tin may have become unreliable, scarce and costly.¹²² These circumstances are seen as the primary motivation for Massalia’s search for a new avenue of trade. The reason why there was no successor to Pytheas’

voyage was the realization that the distance from Massalia to Brittany, by sea, was more than three times longer than the route across Gaul,¹²³ and thus not as profitable as some might have anticipated.

Accounts of trade in British tin survive in the writings of Diodorus and Pliny. These are quoted in full below.

(Diodorus Siculus 5.22.1-4)

...at this time we shall discuss the tin which the island produces. The inhabitants of Britain who dwell about the promontory known as Belerium are especially hospitable to strangers and have adopted a civilized manner of life because of their intercourse with merchants of other peoples. They it is who work the tin, treating the bed, which bears it in an ingenious manner. This bed, being like rock, contains earthy seams and in them the workers quarry the ore, which they then melt down and cleanse of its impurities. Then they work the tin into pieces the size of knucklebones (*astragalo*) and convey it to an island, which lies off the coast of Britain and is called *Ictis*, for at the time of ebb-tide the space between this island and the mainland becomes dry and they can take the tin in large quantities over to the island on their wagons. And a peculiar thing happens in the case of the neighbouring islands, which lie between Europe and Britain, for at flood-tide the passages between them run full and they have the appearance of islands, but at ebb-tide the sea recedes and leaves dry a large space, and at that time they look like peninsulas. On the island of Ictis the merchants purchase the tin of the natives and carry it from there across the Straits to Galatia or Gaul; and finally making their way on foot through Gaul for some thirty days, they bring their wares on horseback to the mouth of the River Rhone.

(Pliny 4.16.104)

The historian Timaeus says there is an island named *Mictis* lying inwards six days sail from Britain where tin is found and to which the Britons cross in boats of osier covered with stitched hides.

Pliny's version is important because it acknowledges Timaeus as its source. Timaeus of Tauromenium was an armchair historian¹²⁴ who was familiar with the work of his contemporary, Pytheas.¹²⁵ It seems reasonable to conclude that Timaeus' information on Britain could only have come from Pytheas. Timaeus may also have been the source behind Diodorus' account of British tin.¹²⁶ However, it has been suggested that both Pliny and Diodorus knew of Timaeus only through an intermediary,¹²⁷ and that Diodorus obtained his material directly from Pytheas.¹²⁸ Ultimately, their accounts are based on the observations of the Massiliote explorer.

There are obvious discrepancies between the two accounts cited above. One inconsistency relates to the Ictis of Diodorus, which survives in Pliny as *insulam Mictim*. It is convincingly argued that the initial 'm' of *Mictim* is the result of dittography, with the final 'm' of *insulam* being repeated during copying.¹²⁹ The mention of Ictis by both authors links them to the same tradition, which can be traced back to the fourth century BC through reference to Timaeus. Obviously, Diodorus' version of the tin trade via Ictis is a more detailed and coherent narrative, but the major differences between the two accounts concern the mode of transport used in moving the tin from the mainland to Ictis and the distances involved. In Diodorus, Ictis is an island only at high tide, joined to the mainland by a causeway, over which tin is carried in wagons at ebb tide. Pliny, on the other hand, places Ictis six days sail from Britain, to which the Britons sail in curragh-like craft. Brown¹³⁰ believes that Pliny is mistaken, and proposed that the mention of 'six days' suggests confusion with Thule, which is said to have been six days sail north of Britain.¹³¹ Pliny's method of writing was based on copious notes and extracts gleaned from his reading.¹³² His work has been described as a 'mosaic of excerpts'. Rackham remarked that Pliny's compilation was sometimes unintelligible, because he failed to understand his authority, or else gave wrong Latin names to things dealt with by his sources in Greek.¹³³ Such an eclectic approach probably contributed to his discrepant version. Nevertheless, Pliny's specific mention of hide-covered boats¹³⁴ suggests that his version is not an invention, but a misconception. One might conjecture that Diodorus and Pliny, each exercising the selective process of the historian, produced their own abstract of Pytheas' more detailed report. Pytheas may have described the transport of tin in hide-covered boats from Ictis to Gaul. It is probable that Pliny garbled this account, and instead of carrying the tin

across the Channel, as Diodorus implies, he erroneously substituted Ictis as the destination.

The identification of Ictis has excited scholarly interest since 1756, when Borlase proposed the Scilly Isles. Numerous locations have been advanced, and are conveniently summarized by Maxwell,¹³⁵ with later additions by Cunliffe¹³⁶ and Hawkes.¹³⁷ According to Diodorus, Ictis was not the only place that became an island at high tide, so its precise location will no doubt continue to incite debate. The two main candidates, however, are St. Michael's Mount and the Isle of Wight (Vectis). With reference to Diodorus, the transportation of tin by wagon from the tin-bearing Southwest to the Isle of Wight would require a tediously long overland journey.¹³⁸ Yet the main problem in identifying Ictis with the Isle of Wight is that at no time during the historical period would it have been possible to transport tin by wagons over a causeway. The Isle of Wight was cut off from the mainland during the Flandrian transgression, which followed the last glaciation. Sometime between 10,000 - 5,000 BC, the chalk ridge between the Needles and the mainland was breached by the combined action of the sea and the Solent. During this period, melting ice caused a eustatic rise in sea level of at least forty-five metres, which submerged local forests.¹³⁹

Nevertheless, scholarly opinion is polarized between Ictis (St. Michael's Mount) and Vectis (Isle of Wight), because the problem is misunderstood. Ictis and Vectis are linguistically the same.¹⁴⁰ Rivet and Smith remarked: "We need suppose, then, only one original version of (*V*)*Ictis* for *Vectis*, in the Greek of Timaeus". While the names are *linguistically* the same, they are obviously not *geographically* the same. Our earliest reference to Ictis, Timaeus, placed it in the context of the tin trade. Therefore, it would be reasonable to look for its location near the tin-fields of Cornwall and Devon, a place where tin ingots could be easily transported by wagon over a causeway to an offshore island. Without reservation, St. Michael's Mount fits Diodorus' description. However, four hundred years separate the first mention of Ictis from the next extant reference in Pliny.¹⁴¹ He places Vectis between Ireland and Britain! Again, Pliny appears to have garbled his account,¹⁴² probably having no idea where Vectis was exactly. Suetonius,¹⁴³ writing in the first quarter of the second century AD, mentions Vectis within the context of Vespasian's military career during the Claudian conquest of Britain. His contemporary, Ptolemy,¹⁴⁴ also mentions the island by name. Thus, only in the literature of the second century AD is Vectis clearly linked with the Isle

of Wight, though one could argue, on the basis of Vespasian's conquest of the island, for a mid-first century association. The island of Ictis had been part of the historical record since the late fourth century BC, but in the intervening centuries, by the time of the Claudian conquest, its exact location had been forgotten. Consequently, when the Romans arrived, they assumed that the Isle of Wight was Ictis, and so named it. In doing so, Ictis, the toponym originally given to St. Michael's Mount by Pytheas was transferred to the Isle of Wight. This is only one example of the transference of toponyms in antiquity. Thule is a prime example of this phenomenon. Pytheas placed this island vaguely to the north of Britain. Its precise location was, and still is, unknown, but during the Agricolan circumnavigation the toponym was understandably assigned to the Shetlands.¹⁴⁵ Mona is another example. This island was first mentioned by Caesar,¹⁴⁶ who placed it mid-channel between Ireland and Britain. It may originally have referred to the Isle of Man, but later authors identified it with Anglesey. In spite of the problems raised by the incongruity of the two passages cited above, it does not detract from the fact that during the fourth century BC there was an already established trade in British tin, which led across Gaul to the Greek *emporía* of the Mediterranean. No doubt it was this traffic, and its disruption during the period of Celtic migrations that induced Massalia to send Pytheas on a voyage of commercial reconnaissance.

The Cassiterides

A topic inseparably connected with the British tin trade is the location of the Cassiterides, the *Tin Islands*.¹⁴⁷ Numerous attempts to locate them have been made, but difficulties arise because extant sources do not agree in detail. Moreover, a conspicuous amount of chauvinism has distorted the issue. For the British, as early as Camden,¹⁴⁸ the Cassiterides referred to the Scilly Isles. The French have looked to islands off the coast of Brittany, and the Spaniards have advanced their own candidates.¹⁴⁹ The first to mention the Cassiterides is Herodotus, who candidly declared he knew nothing about them.¹⁵⁰ Diodorus Siculus (ca.60-30 BC) makes the earliest detailed description of the Tin Islands.

For there are many mines of tin in the country above Lusitania (central western Spain) and on the islets which lie off the coast of Iberia out in the Ocean, and are called because of that the

Cassiterides, and tin is brought in large quantities also from the island of Britain to the opposite of Gaul. (5.38.4-5)

Writing at a slightly later date, Strabo mentions the Cassiterides on four occasions.

If you sail...from the Sacred Cape (Cape St. Vincent) you come to the people called Artabrians, your voyage is northward, and you have Lusitania on your right hand. Then the rest of your voyage is eastward ... until you reach the headlands of the Pyrenees ... the westerly parts of Britain lie opposite...towards the north; and in like manner the islands called Cassiterides, situated in the open sea approximately in the latitude of Britain, lie opposite to and north of the Artabrians. (2.5.15)

The islands, which I have already mentioned, lie off Europe, outside the Pillars: Gades, the Cassiterides and the Britannic islands. (2.5.30)

The Cassiterides are ten in number, and they lie near each other in the high sea to the north of the port of the Artabrians. One of them is a desert, but the rest are inhabited by people who wear black cloaks ... they live off their herds, leading for the most part a nomadic life. As they have mines of tin and lead, they give these metals and hides from their cattle to the sea-traders in exchange for pottery, salt and copper utensils. Now in former times it was the Phoenicians alone who carried out this commerce, that is from Gades, for they kept the voyage hidden from everyone else...Still by trying many times, the Romans learned all about their voyage. After Publius Crassus crossed over to these people and saw that the metals were being dug from only a slight depth, and that the men were peaceable, he forthwith laid abundant information before all who wished to traffic over this sea, albeit a wider sea than that which separates Britain from the continent. So much then for Iberia and the islands that lie off its coasts. (3.5.11)

Tin, however, is not found there (Turdetania: south-western Iberia) on the surface of the ground... it is produced both in the country

of the barbarians who live beyond Lusitania and in the Cassiterides Islands, and tin is also brought to Massalia from the British Isles (Poseidonius *apud* Strabo 3.2.9)

In spite of an increased awareness of the geography of Atlantic Europe during the Julio-Claudian period, later authors slavishly repeated the concept of ‘Tin Islands’. Pomponius Mela, writing about AD 37-45, relates, “on the Celtic coast are a number of islands that, because they are all rich in tin, are called by one name, Cassiterides”.¹⁵¹ Also in the first century AD, Pliny adds: “opposite to Celtiberia are a number of islands called by the Greeks the Cassiterides because of their abundance of tin”.¹⁵² Solinus, writing in the early third century, also places the Cassiterides “towards the side of Celtiberia”.¹⁵³ Ptolemy actually assigned geographical co-ordinates to these almost mythical islands. He recorded that “there are ten Cassiterides Islands in the Western Ocean, which are located at 4 45/30.”¹⁵⁴ He specifies longitude first, followed by latitude, which is the reverse of modern practice, with all longitudinal co-ordinates expressed in degrees east of a meridian drawn through the Fortunate Isles (The Canaries).¹⁵⁵ A glance at the map shows these co-ordinates to be approximately 200 miles north-west of the tip of Galicia, where there are no islands.

Ultimately, it might be said that there are no islands off the coast of Atlantic Europe, which are rich in tin, except Britain. So, were the Cassiterides really islands? Due to poor geographical knowledge, it is possible that various parts of the European mainland were misrepresented as islands. For example, Scandinavia was once thought to be an island.¹⁵⁶ In fact, we have seen that the European Atlantic coastal region was virtually unknown before the voyage of Pytheas, and it is likely that Classical geographers had only the vaguest idea of where the Cassiterides were, and that was somewhere in the Atlantic West.¹⁵⁷ Even as late as the mid-second century BC, Scipio could get no information from Gallic merchants regarding Atlantic trade,¹⁵⁸ and the Carthaginian practice of concealing information about their commercial activities seems to have been effective. Strabo¹⁵⁹ remarks:

Now in former times it was the Phoenicians alone who carried on this commerce [to the Cassiterides]...for they kept the voyage hidden from everyone else. Once, when the Romans were following a certain [Punic] captain, in order that they too might learn of the markets in question, the ship captain, out of

jealousy, purposely drove his ship into shallow water thus wrecking his vessel.

In order to explain the source of Atlantic tin, without actually knowing where it came from, Classical writers resorted to two literary devices. One was to turn to mythical geography. For instance, Dionysius Periegetes identified the Tin Islands with the fabulous Hesperides.¹⁶⁰ The second device was to use an island-construct, which entailed identifying a vague location as an island, then naming it in purely descriptive terms. Thus, an unknown source of tin became Cassitera¹⁶¹ (island of tin), or, if more than one island is involved, Cassiterides. Similarly, a source of amber somewhere off the coast of Germany is called Electrides (amber islands)¹⁶². This practice can be compared to fifteenth century reports of Spice Islands in the Far East. Hence, it appears that *Cassiterides* was first employed as a generic term to denote an unknown source of tin somewhere in the Atlantic Province of Europe. However, the belief in the existence of Tin Islands died hard, and later authors attempted to locate them within the framework of their current geographical conceptions. Diodorus, Strabo and Ptolemy clearly distinguish the tin of the Cassiterides from that of Britain. The Tin Islands are also seen as tin-producers, with working mines. Consequently, speculation that the Cassiterides were the Scilly Isles fails to take into account that the Scillies have no significant deposits of tin.¹⁶³ If the Cassiterides of later authors can actually be identified, we must consider that they are always placed north of Spain; they are tin-producers; and they are separate from Britain. The only suitable alternative remaining is the Atlantic seaboard of Brittany, an area relatively rich in alluvial tin deposits and lead,¹⁶⁴ precisely those metals mentioned by Strabo¹⁶⁵ and in the *Ora Maritima*.¹⁶⁶ The Atlantic seaboard of Brittany is, of course, the Oestrymnides of Avienus, the region visited by Carthaginian traders from Gades.¹⁶⁷

As cited above, Strabo relates that Publius Crassus visited the inhabitants of the Cassiterides, and found them working shallow mines. The identity of this individual has been a matter of some debate. Stevens suggested that he was Publius Licinius Crassus, Julius Caesar's lieutenant, who subdued the tribes of Armorica in 57 BC.¹⁶⁸ He argued that while stationed in Brittany, Crassus sailed to Britain to reconnoitre "the age old prehistoric sea-route to Southwest Britain". This was done in preparation for a campaign against the Veneti, who controlled the western approaches of cross-Channel trade.

However, after spending the summer of 57 subduing Armorica, Crassus wintered with the Seventh Legion “by the Ocean in the country of the Andes” [i.e. north of the Loire]. Late in 57 or early in 56 BC, war with the Venetic confederacy broke out, so it is difficult to see when Crassus would have had an opportunity to visit Britain. It seems unlikely that he would have risked a winter crossing of the English Channel. Caesar mentions nothing of such an expedition. Stevens’ underlying hypothesis, of course, was that the Cassiterides were the British Isles, but our sources show the two to be distinct. Strabo certainly knew that Britain produced tin, and if the Caesarean Crassus had in fact sailed to Britain, there would have been no reason for him to mask the fact by using the label ‘Cassiterides’. Those who identify Crassus with Caesar’s lieutenant are numerous.¹⁶⁹

The opposing school believes that Strabo is referring to Publius Licinius Crassus, grandfather of Caesar’s lieutenant, consul in 97 BC, governor of Further Spain and conqueror of the Lusitanians in 93 BC.¹⁷⁰ There are several salient points that recommend this earlier Crassus. He is well placed historically.¹⁷¹ His activities took place only fifty years after the defeat of Carthage in 146 BC, a period when the Roman world was eager to learn the details of Atlantic trade. Scipio had in fact interviewed merchants from Massalia, Narbo and Corbilo in the 130’s in order to confirm Pytheas’ reports, but learned little.¹⁷² It is hard to believe that Roman entrepreneurs would have waited until the time of Caesar, nearly a century after the fall of Carthage, to search for the rich deposits of Atlantic tin. However, the most compelling indication is that the Cassiterides are nearly always located in relation to Iberia. This is what one would expect had the Governor of Further Spain explored and described the route. Strabo states that in order to get to the Cassiterides, Crassus crossed a sea wider than that which separates Britain from the continent. Again, it is intimated that the Cassiterides and Britain are not the same place, and we can conclude that the sea referred to is the Bay of Biscay. It would seem that Publius Crassus, in about 95 BC, sailed northward from Iberia, across the Bay of Biscay, to the Cassiterides, which can only refer to the tin-bearing regions of the Breton Peninsula.

Julius Caesar

While Publius Crassus was visiting the tin mines of Armorica and remarking on the friendliness of its people, it never occurred to him that forty years later his own grandson, at the head of a legion, would be demanding their

submission. In 58 BC Julius Caesar unleashed a *blitzkrieg* upon Gaul, and to all concerned he must have seemed unstoppable. No tribe or consortium of tribes was strong enough to withstand him. The Rhine was not an obstacle. It was bridged. The English Channel was not a barrier. It was crossed. His first voyage to Britain was little more than armed reconnaissance, but he returned with an armada of over 800 ships, 2000 cavalry and five legions: an army that was willing to follow him anywhere, even to *another world*.

In 55 BC, Caesar acknowledged that the summer was drawing to a close. There was little time left for a fully-fledged military campaign against the Britons, but he thought it would be advantageous to at least visit the island, observe the character of its people and gain some knowledge of its districts, harbours and landing places. He remarked that such things were unknown to the Gauls. After all, Britain was not a place to visit 'without good cause'. In fact, nobody except merchants journeyed there, and even they knew nothing except the seacoast and the area immediately opposite Gaul. Caesar interrogated these traders, but learned absolutely nothing.¹⁷³ All this, of course, is pure window dressing, designed to enhance the unfamiliar aspect of the island and to heighten its sense of mystery among the reading public of Rome. It is difficult to accept that maritime traders knew nothing of Britain's harbours or the people with whom they were trading, though it may have been that the merchants of Gaul, mistrustful of Roman intentions, were reluctant to provide information that might jeopardize their own commercial interests. When we compare this *terra incognita* of Caesar's pre-invasion Book IV to the comparative wealth of detail he imparts in post-invasion Book V, we are meant to conclude that his incursion into Britain was responsible for this improved state of knowledge. However, we know that this is only partially true. The section discussing the geography and ethnography of Britain¹⁷⁴ is clearly a digression, which abruptly breaks the narrative of the military campaign.¹⁷⁵ In these passages, Caesar describes the triangular shape of the island, with Cantium representing the south-eastern angle, and remarked 'some have written that in midwinter, night lasts for thirty whole days'. It is clear that Caesar is referring to the statements of earlier authors, not to something he had heard in Britain. He also mentions Ireland and Mona,¹⁷⁶ both of which are well outside of his sphere of activity. Circumstantial evidence suggests that he derived this information from the tradition of Pytheas.¹⁷⁷ Nevertheless, we must not underestimate Caesar's own contribution. He did dispatch Volusenus to reconnoitre the coast.¹⁷⁸ He did interview native Britons regarding the island's size,¹⁷⁹ and he did see at first-hand some of

southeastern Britain and the Thames. Tierney¹⁸⁰ noted that, although Caesar maintained the traditional triangular shape of Britain, he gave shorter, more realistic, lengths to the sides, and correctly made the east coast the longest.¹⁸¹ In contrast, previous measurements for the circumference of Britain were twice the actual size. There was also a change in the conception of Britain's position relative to the continent. Caesar placed the south coast of England nearer to Gaul than Eratosthenes, and sited Ireland to the west instead of the north (see Appendix).

One salient point is revealed in *De Bello Gallico*, well before Caesar's appearance, political alliances and economic relationships between the tribes of Britain and Gaul had been formed. Caesar relates that 'within living memory' Diviciacus was king in Gaul and exercised sovereignty in Britain. Mercenary activity or formal treaty alliances involving obligations of military assistance in time of war is noted in Caesar's reference to Britons assisting Gallic tribes in their fight against Rome.¹⁸² Britain was also a refuge for political fugitives.¹⁸³ In a passage from Dio Cassius,¹⁸⁴ we learn that British tribes used their 'friends', the Morini, to act as intermediaries in arranging peace with the Romans. Bonds of kinship, intermarriage and a common cultural heritage no doubt strengthened these relationships. Caesar makes reference to the migration of Belgae from the continent to Britain, and noted that the inhabitants of Kent had a very similar way of life to the Gauls.¹⁸⁵

Caesar's commentary also provides a singular glimpse at mid-first century BC cross-Channel trade, which must have been reasonably intense. Gallic traders certainly visited the southern districts of Britain,¹⁸⁶ and Kent is singled out as the place 'where almost all the ships from Gaul come to land'.¹⁸⁷ It was these traders that forewarned the British of Caesar's invasion plans, which prompted some insular tribes to send deputations to the Romans.¹⁸⁸ These references clearly relate to commercial activity between the tribes of Belgica and South East Britain. Further to the west, Caesar discloses a similar state of affairs, namely an already established trade between Armorica and South West England. He writes:

These Veneti exercise by far the most extensive authority over all the sea coasts in those districts, for they have numerous ships, in which it is their custom to sail to Britain ... they have as tributaries almost all those whose custom it is to sail that sea.¹⁸⁹

The theme of British military assistance is repeated,¹⁹⁰ but this time the tribes of Armorica are the beneficiaries. While there is no reason to doubt the participation of some insular warriors in the struggle against Rome, we must remember that this is the only reason given by Caesar for his campaigns against the Britons. It is a transparent pretext used to justify a campaign well outside his proconsular mandate. The real reason for the invasion of Britain was no doubt to enhance his prestige among the electorate of Rome. If we are to believe Florus,¹⁹¹ 'he was after all only out to acquire a reputation, not a province'.

We can only guess at the level of anticipation and excitement in Rome on receiving the news of Caesar's exploits in Britain. Cicero,¹⁹² for one was 'waiting in suspense' for news from his brother, who had accompanied Caesar to Britain.¹⁹³ Since so little was known about the island, rumours must have been rife, and the promise of financial gain enticing. It is interesting, in this context, that we read of private vessels accompanying the military armada in the campaign of 54 BC.¹⁹⁴ These no doubt were filled with fortune hunters, and, on their return, crowded with a 'great number of prisoners'¹⁹⁵ bound for the slave markets of Rome. Suetonius, perhaps naively, stated that British pearls were the lure that prompted Caesar's invasion.¹⁹⁶ Cross-Channel merchants may have traded these items. Caesar, in fact, did secure a sufficient number of pearls on his campaign to decorate a breastplate, which he dedicated to Venus Genetrix in Rome.¹⁹⁷ Caesar's expeditions to Britain, as he intended, captured the popular imagination. The senate voted twenty days of thanksgiving, five longer than was given for the subjugation of all Gaul. However much the public euphoria, there was private disappointment. Britain did not live up to Cicero's expectations. There was no gold, no silver and no booty,¹⁹⁸ and as for the quality of the slaves, he wrote, 'I don't suppose you're expecting any of them to be accomplished in literature or music'.¹⁹⁹ He summed up his disenchantment with Britain in a letter to his brother. "There is nothing there for us to fear or rejoice at."²⁰⁰

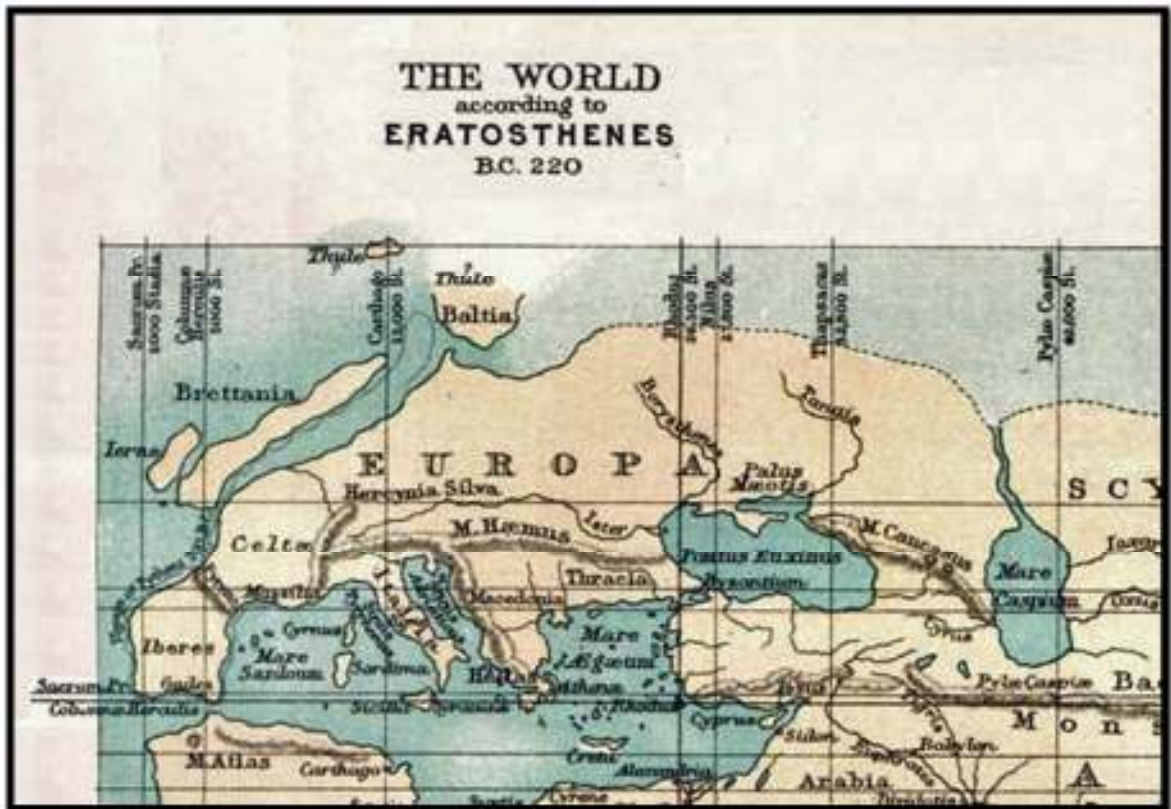
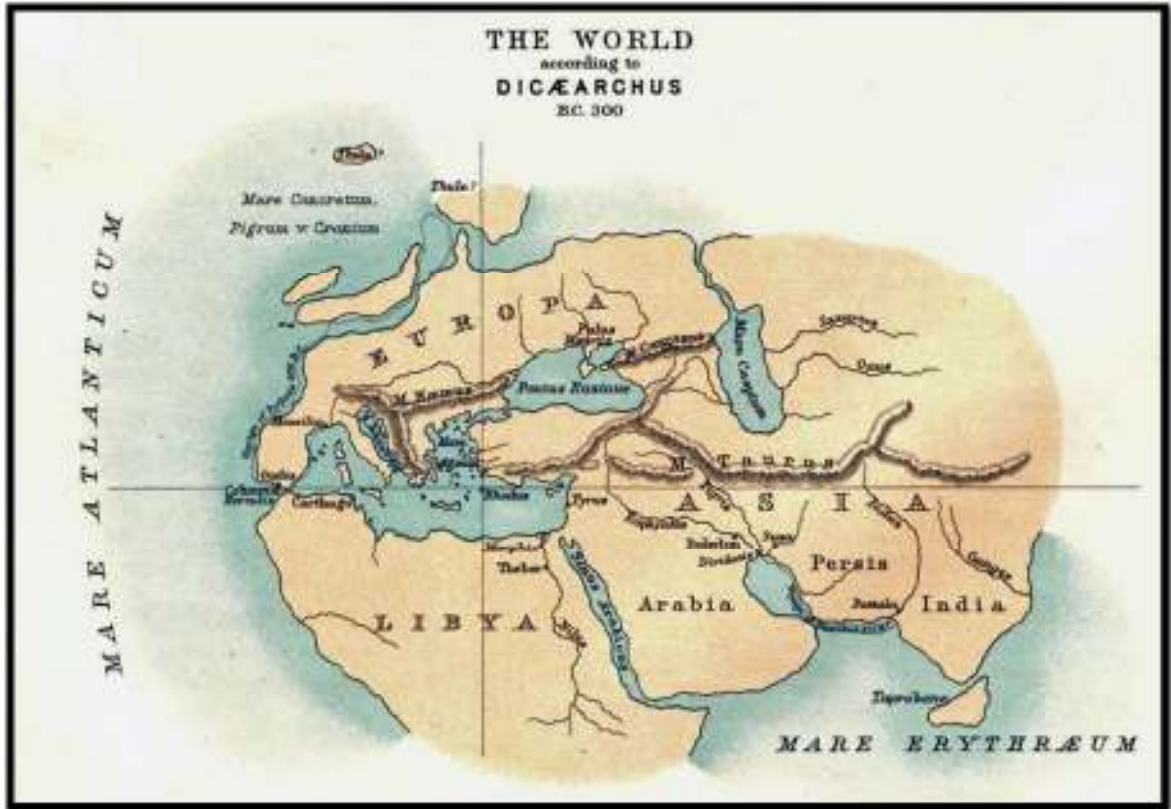
Summary

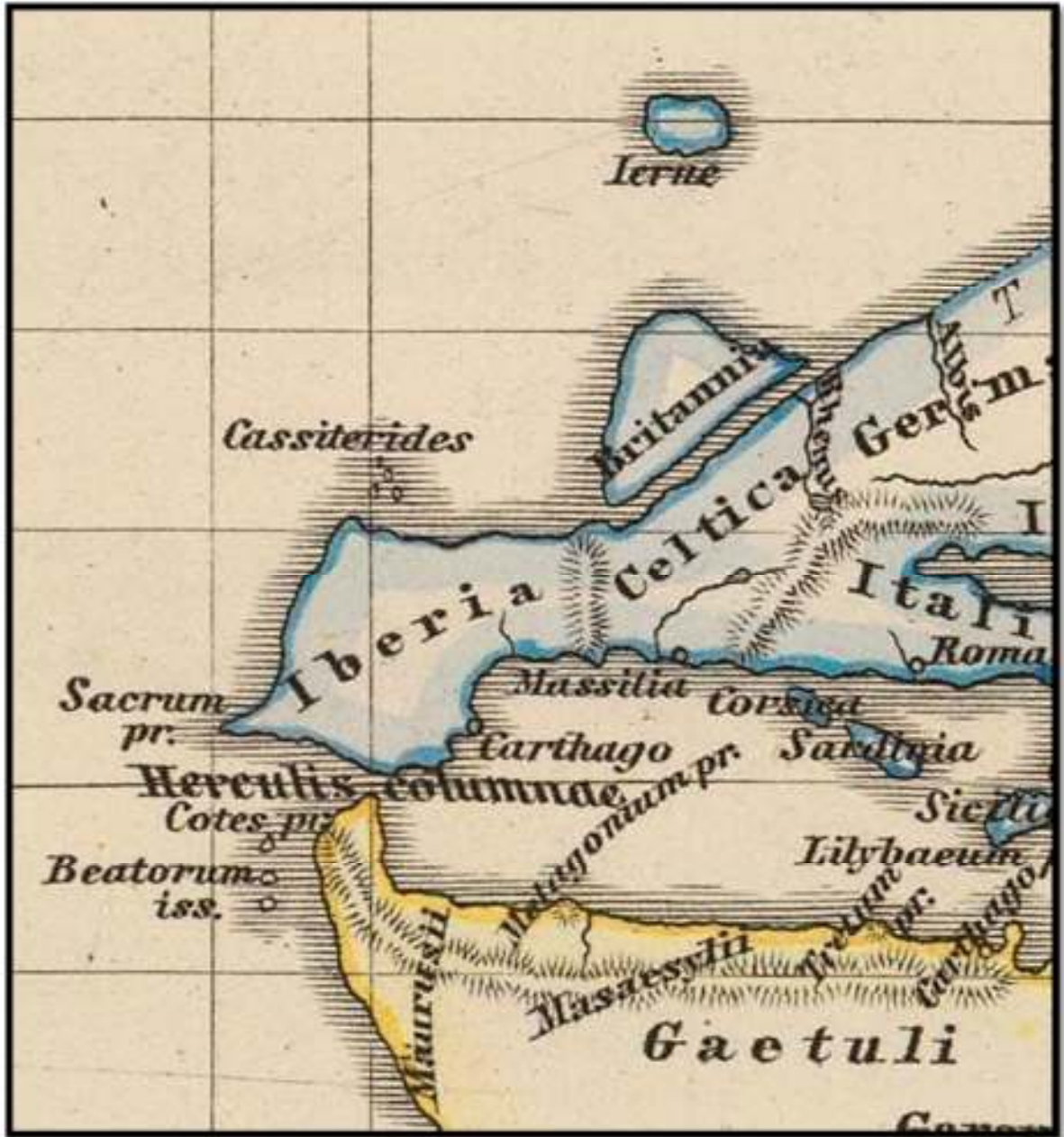
For the three centuries, between the first-hand accounts of Pytheas and Caesar, extant descriptions of Britain are derivative and repetitive. Despite tendencies to denounce Pytheas during this period, geographers and

historians were reliant solely upon his observations.²⁰¹ Generally, they treat Britain simply as a geographical entity. When detail is provided, it is mostly preoccupied with tin. Only with the passing of *Gallia Comata* into the hands of Rome did the full market potential of Britain begin to be realized. Strabo is the first author to mention a British export other than tin, and trade with Rome brought import and export duties.²⁰² Prior to Roman expansion into Gaul, Britain was literally on the fringe of the known world. Caesar's two expeditions into Britain were more than military forays. They were harbingers of change. The old Celtic order was passing. Britain's closest neighbour was now a fledgling Roman province, and part of a vast, powerful and rapacious empire.

Appendix







Strabo's Conception of Western Europe

Abbreviations

Classical citations follow *Oxford Classical Dictionary*

BAR	<i>British Archaeological Reports</i>
CAH	<i>Cambridge Ancient History</i>
CQ	<i>Classical Quarterly</i>
FHG	<i>Fragmenta historicorum graecorum</i> (see Müller)
JHS	<i>Journal of Hellenic Studies</i>
JRS	<i>Journal of Roman Studies</i>
OJA	<i>Oxford Journal of Archaeology</i>
PPS	<i>Proceedings of the Prehistoric Society</i>
RE	<i>Paulys Realencyclopädie der classischen Altertumswissenschaft</i>
RIB	Collingwood, R.G. & Wright, R.P. (1965) <i>The Roman Inscriptions of Britain: fasc. 1. Inscriptions on stones</i> (Oxford, Clarendon).

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Notes

¹ Coles, 2000:399.

² Scott, 2011. Rainsford, 2002. Morieux, 2016.

³ *Richard II*

⁴ Freeman, 1892.

⁵ Scheidel, 2014:9.

⁶ Himilco of Carthage *apud* Avienus *Ora Maritima* 117-129

⁷ Herodotus 4.152.

⁸ Pliny *NH* 7.56.19: rendered into Greek as Midakritos or Meidokritos (Monedero 1983:214). Some identify him with Midas, King of Phrygia, who flourished ca. 700 BC. This is speculation. We can neither identify nor date him.

⁹ Hodge, 1998:133. *FHG* (1851) 4:408.

¹⁰ Plato *Timaeus* 26E cited by Poseidonius *apud* Strabo 2.3.6. He thought it possible that Atlantis was not a fiction. See also Babcock, 1922.

¹¹ Solinus 69; Diod. Sic. 3.35.7.

¹² Isles of the Blessed: Hesiod, *Works and Days*, 167-173. Hades: Homer *Od.* XI. The concept of Elysian islands in the Atlantic survives in Celtic and Arthurian legend. The fullest account of Avalon is given in the *Gesta Regum Britanniae* (c. 1235). Geoffrey of Monmouth in the *Vitae Merlini* describes a similar Isle of Apples, perhaps inspired by the Hesperides. The *Voyage of Bran* recounts a journey to the Isles of Joy and Isles of Women, which are located west of Ireland: MacCulloch, 1911:363-364. There is a genre of similar Irish voyage epics (*immrama*), many of which are modelled on the *Voyage of Maelduin*: Rolleston, 1994:309. Welsh and Irish sources refer to an Isle of Glass: MacCana, 1970:129. A miraculous island can be found in Giraldus Cambrensis *Topography of Ireland*, 39. For islands as Celtic holy places: Kendrick, 1927:138-139.

¹³ Pausanias 1.23.5-6; cf. Ptolemy 7.2.30

¹⁴ Strabo 1.4.6 and Seneca *Medea* 375-379 both pondered the existence of such vast new worlds. Plutarch's *De facie quae in orbe lunae apparet*, 941 recounts the existence of a western continent with intervening islands: commentary: Hamilton, 1934:24-30.

¹⁵ Kronos and the Isles of the Blessed: Hesiod, *Works and Days*, 169 (Commentary: Evelyn-White, 1913:219-220). Pindar, *Ol.* 2.70. Plutarch, *De Defectu Oraculorum* 420a.

¹⁶ Plutarch, *De Defectu Oraculorum* 410a. Demetrius dedicated at York two bronze tablets, inscribed in Greek, one of which was to the maritime deities, Oceanus and Tethys, presumably in gratitude for a safe return from his voyage: Ogilvie and Richmond, 1967:33; RIB 662-663. For the dating of Demetrius' voyage: Ogilvie 1967:108-119.

¹⁷ Vergil *Ecl.* 1.66; Commentary by Servius uses *alter orbis*; cf. Isidorus Hispalensis *Etymologiae* 9.2.102 (414): [The Britons] a people situated in the ocean, with sea between, as it were outside the world, of whom Virgil wrote 'the Britanni, a world apart'. Solinus 22.1 "The shores of the coast of Gaul were the end of the world, but the island of Britain...might deserve the name of another world". This aura of otherworldliness was persistent, and used by authors of the Late Roman Period. Claudian relates that the home of the dead lay at the western extremity of Gaul, where the murmurings of departed souls could be heard in Britain. Procopius described men ferrying cargoes of ghostly apparitions

from the mouth of the Rhine to Britain itself. Claudian, *In Rufinum* I,126ff. Procopius, *Bellum Gothicum* IV, 20; Commentary: Bury, 1906

¹⁸ *Caes.* 23.2

¹⁹ Dio Cass. 60.19; On the refusal of Caligula's legions to cross the Channel: Balsdon, 1934:91-94

²⁰ Regarding the West, Fabre (1981) discusses the process by which Hellenic mythic geography was supplanted by Alexandrian empirical geography.

²¹ Stephanos of Byzantium *Ethnikon*: s.v. Μασσαλία & Νάρβων. . He also mentions a Celtic city called Nyrax (Νύραξ), whose identity is unknown, but its location is probably on or near the Mediterranean coast, and not Noreia, Austria as some have suggested.

²² He had heard of Gades (iv.8), Tartessus (i.163) and the Celts. He could not confirm the existence of a sea to the north of Europe: 3.115. He was evidently unfamiliar with the Alps, identifying them as a river: 4.49. Erroneously, he has the Ister (Danube) flowing from the land of the Keltae and the city of Pyrene: 2.33.

²³ 3.115.

²⁴ Cunliffe, 2002.

²⁵ Plutarch *Caes* 23.2

²⁶ *Agr.* 10

²⁷ 39.50

²⁸ Tac. *Agr.* 10 ; 38

²⁹ These contain four lacunae. The poem was apparently much longer, and may have continued on to the Black Sea as its introductory lines imply.

³⁰ A periplus (*Περίπλους*, plural: *Περίπλοι*) is a sailing manual, which lists sequentially the harbours, rivers, maritime cities and headlands a sailor would expect to meet on a coasting voyage. Periploi were used as navigational aids, sometimes giving distances between two points, which were usually measured in days of sailing. Sometimes adjacent lands and peoples of the interior are mentioned in passing. The primacy of sea travel established the *periplus* as one of the principal forms of Greek geographical literature.

³¹ Carpenter 1966:200.

³² 1922

³³ Schulten, 1922:9-10 thought it may have been written by Euthymenes of Massalia.

³⁴ Founded *circa* 600 BC - 575 BC.

³⁵ Ora Maritima, 90-114. The first English translation of the entire poem: Murphy, J.P., 1977; translations of this passage by Rivet and Smith, 1979:54-55 and Carpenter, 1966:202-204

³⁶ *ast hinc duobus in sacram, sic insulam dixere prisci.* Ierne, the name given to Ireland, most probably by Pytheas, appears to have been confused with the Greek adjective *hieros*, meaning 'sacred'; hence Avienus' translation of Ierne as 'sacred isle' and its inhabitants 'Hierni' (*gens Hiernorum*): Rivet and Smith, 1979:40; O'Rahilly, 1946:83 n.6

³⁷ *-oussa* ending indicates Phocaeen origin: Carpenter 1925:13, 32-33

³⁸ 1977

³⁹ See Rivet & Smith, 1979:39

⁴⁰ *Geographia Compendiaria* IV.13 & VII,27

⁴¹ 393b.12

⁴² *Geography* II.2.10

⁴³ *NH* 4.16.102-104

⁴⁴ *NH* 4.111

⁴⁵ *et deinde conventus Lucensis a flumine Navia: Albiones, Cibarci, Egi ...* (Detlefsen, 1866). Teubner and Loeb editions read the passage: *a flumine Navialbiones*, that is, as if the name of a river, and not an ethnic designation.

⁴⁶ Hawkes, 1977:23

⁴⁷ Barber, 1935:1

⁴⁸ Müller, 1853:244-45; Jacoby, 1926:80-81; found largely in Strabo, 3.2.4; 4.4.6; 7.2.1; 1.2.6 and Josephus *Contra Apion* 1.67.

⁴⁹ Bunbury 1959, I:380.

⁵⁰ Cary & Warmington, 1963:15. Ancient mariners had no compass, and while the gnomon could be used to estimate latitude, the lack of chronometers made it impossible to determine longitude (see Sobel, 1995). Distances given in ‘days sailing’ are relative to the effects of wind and current.

⁵¹ Berthelot, 1934. *Ora Maritima* 40-41: *multa rerum iunximus ex plurimorum sumpta commentariis*

⁵² Carpenter, 1966

⁵³ *Ora Maritima* 148-151

⁵⁴ Strabo 3.2.11; Roseman T11. Pytheas had taken gnomon readings at Massalia (Strabo 1.4.4), and must have realized he was on the same latitude when he arrived near San Sebastián at the western end of the Pyrenees. [see note 123]

⁵⁵ *On the Ocean* is cited by name by Kosmas Indicopleustes (*Christian Topography* II.80.6-9) written in the sixth century AD

⁵⁶ Avienus’ named sources, lines 42-50: Hecataeus of Miletus (ca. 500 BC); Hellanicus of Lesbos (ca. 440 BC); Phileas of Athens; Scylax of Caryanda (ca. 500 BC); Pausimachus of Samos; Damastes of Sigeum (ca. 430 BC); Bacoris of Rhodes; Euctemon of Athens; Cleon of Sicily; Herodotus (ca. 450 BC) and Thucydides (ca. 430 BC). Some of these authors may have been used in later, now missing, sections of the *Ora Maritima*.

⁵⁷ 1972: *Pyrene polis* is mentioned by Herodotus (2.33). Avienus may have learned of Pyrene from Herodotus or Hecataeus, both of whom are named sources in *Ora Maritima*. Hecataeus of Miletus certainly knew something of the coastline in question, mentioning both Narbo and Massalia (Pearson, 1939:34-39; 1983:7-10)

⁵⁸ Shefton, 1982:365-368 has outlined evidence for a Carthaginian blockade. Schulten envisaged the implementation of a blockade as early as ca. 500 BC. Hyde, 1947:121 and Cary & Warmington, 1963:255, n.20 see support for this theory in the following quotations: Pindar’s Odes, *Olym.* 3.43-44; *Nem.* 3.20-21; *Nem.* 4.69; *Isth.* 4.22 and Euripides *Hipp.* 743-747. These passages mark the Pillars of Hercules as the terminus of sea travel. At no time is a Carthaginian blockade mentioned, and they need be nothing more than literary allusions to the fact that the Atlantic was largely unknown and forbidding. Bowra, 1964:190, 253 noted that Pindar used “Pillars of Hercules” to denote the limit of mortal ambition (in the context of *hubris*) and the summit of human achievement. Romm, 1992:17-18, similarly, sees the Pillars as a literary device symbolizing the limits of human daring. Strabo 17.1.19 quoting Eratosthenes wrote “the Carthaginians ... used to drown in the sea any foreigners who sailed past their country to Sardinia or to the Pillars, and it is for this reason that most of the stories told about the West are disbelieved”. Eratosthenes was contemporary with the First and Second Punic Wars, and may have been reporting wartime practices. About the time of Pytheas, an agreement was made between Carthage and Rome (ca. 348BC), which

defined their respective spheres of influence, and forbade Rome from trading beyond Mastia (Cartagena) (Polybius 3.24). Neither Massalia nor any other Greek colony is mentioned in this context. Greek commodities continued to reach south-western Iberia after the fifth century BC: Rouillard, 1975. Fernández Jurado & Cabrera Bonet, 1987, concluded that the Straits of Gibraltar was not closed to Mediterranean shipping or cultural events. Judice Gamito, 1988 sees continued Greek presence. The major Punic colony of Gadir (Gades) was sited not to control shipping through the Straits of Gibraltar, but to exploit Atlantic trade and the resources of the Guadalquivir Valley.

⁵⁹ Whittaker, 1978:80-81; 1974:77

⁶⁰ 2.47.1-3

⁶¹ Murphy, E., 1989:61, n.149

⁶² 5.21.3

⁶³ Temperate climate noted by Caesar *BG* 5.12; cf. Strabo 4.5.2

⁶⁴ Hillman, 1981:146-148; Applebaum, 1954:104

⁶⁵ Hennig, 1929:19; Warner, 1994:113 suggested that Hecataeus might have been describing Ireland, equating the temple with the ritual monument at Navan.

⁶⁶ e.g. Ellis, 1994:174; Harding, 1974:82; Kruta, 1991:499

⁶⁷ Bunbury, 1883:I, 148; Ashbee, 1978:154

⁶⁸ Barber, 1928:265

⁶⁹ Murphy, E., 1989:60-61, n. 146

⁷⁰ Thomson, 1948:150 “It is not certain that Hecataeus knew of Pytheas or set out to parody him”.

⁷¹ Bunbury 1959, I:149. Hecataeus makes no mention of Gades, and apparently knew nothing of the western and northern shores of Europe.

⁷² 4.8

⁷³ Bunbury, 1883:I, 385

⁷⁴ Aristotle *Meteorologica* 1.13.19 repeats the error of Herodotus concerning the source of the Ister (see note 21). 2.1.14 characterizes the Atlantic as shallow, muddy and undisturbed by winds, showing how little Greek mariners knew about the Ocean. He fails to mention the Alps, identifies the Herkynian Forest of Germany as a mountain, and holds to the fiction of the Rhipaeian Mountains: Bunbury 1959, I:400-401.

⁷⁵ Fraser, 1971:22; cf. Polybius 3.38

⁷⁶ Strabo 1.4.5; 4.4.1. Roseman, 1994:38-39; F4; T14. *RE* s.v. ‘Osismii’

⁷⁷ *Ora Maritima* 91-155

⁷⁸ 1963:112

⁷⁹ A Gallo-Brittonic word rendered in the plural: Rivet & Smith, 1979:39-40, 280-282; Wainwright, 1955:134, 158. It survives in Old Welsh as *Prïtdin* (Picts): Koch, 1991:22.

⁸⁰ Strabo 2.5.8; cf. 1.4.2

⁸¹ III.57.2-3

⁸² Stephanus of Byzantium (6th cen. AD) s.v. Aebudae (Hebrides)

⁸³ Quintillian 1.7.7 noted ‘B’ spellings pronounced as ‘P’. Smith, W., 1959:77; Lindsay, 1894:75; Allen, 1978:21.

⁸⁴ Eustathius *Commentary on Dionysius Periegetes*, 568, 284; and Stephanus of Byzantium s.v. *Brettia*. Periegetes, “The Guide”, a contemporary of Hadrian, outlined the geography of the world in pseudo-epic style. He mainly followed Eratosthenes and Poseidonius (via an intermediary), taking little account of subsequent discoveries, and was

absurdly out-of-date: Thomson, 1948:329. His work, used as a school primer was translated by Avienus and Priscian (sixth century AD); with a commentary by Eustathius (12th century AD).

⁸⁵ Chadwick, 1949:67

⁸⁶ Book I uses *B-*; 2.5.8 represents the first occurrence of *P-*, which is used until 2.5.16; 2.5.28 reverts to *B-* until Book IV, where *P-* is used consistently: Roseman, 1994:45, 55, 67

⁸⁷ “Strabo either used Pytheas directly or through an intermediary source like Timaios or Artemidorus: Roseman, 1994:55.

⁸⁸ Ekwall, 1930:150; following Holder, 1896 *s.v.* *Albion*; Watson, 1926:11-12

⁸⁹ Cognate with Middle Welsh *elfydd* (world, land, earth, country): Williams, 1932:134., and Old Welsh *elbid*: Koch, 1991:21. Cf. Mars Albiorix (King of the Land or World): Evans, 1967:301; and with Albiodurum (near Angers): Rivet 1980:14. There is no derivative of an **albo* (white) in any Celtic language. Celtic words for ‘white’ are from quite different stems: Jackson, 1948:54. See also O’Rahilly, 1946:385. It survives as Albain the modern Irish word for Scotland.

⁹⁰ Koch, 1991:21-22. Rivet & Smith, 1979 *s.v.* *Ivernum*; cf. RIB 377, cognate with Iwerne, Dorset. On the fertility of Ireland see Mela’s remark that the grass was so lush that unrestrained cattle would burst if allowed to eat it: *De Chorographia* 3.53.

⁹¹ See Koch, 1991:21-22.

⁹² 1963:255, n.14.

⁹³ 5.32.3

⁹⁴ Rivet & Smith, 1979:39, 115. Pliny *NH* 4.102: *Albion ipsi nomen fuit*: in the past tense.

⁹⁵ Kantion: Pytheas apud Strabo 1.4.3. Roseman, 1994:20; Walbank, 1979:589; Rivet & Smith, 1979 *s.v.* *Orcades*, *Cantium*, *Belerium*. On Celtic etymology: O’Rahilly, 1946:59; Watson, 1926:29, 64-65; Jackson, 1948:55

⁹⁶ Diodorus Siculus 5.21.3. On the use of the triangle as an aid to geographical understanding in antiquity see Clarke 1999, 103, 207.

⁹⁷ *Ora Maritima* 118, 383, 412

⁹⁸ 2.67.169

⁹⁹ Blomquist, 1979:56; Taylor, 1982:318-319

¹⁰⁰ *Ora Maritima* 114-120

¹⁰¹ Watson, 1926:6; Holmes, 1907:490-492, 512-513

¹⁰² Greek activity beyond the Straits of Gibraltar is alluded to by Herodotus 4.152; Pliny 7.56.197. See Pausanias 6.19 on the Treasury of the Sicyonians at Olympia, built of Tartessian bronze (mid-seventh century BC). Phocaeans, seen by Boardman (1994:67-74) to be the prime Greek colonizers, were invited to settle in Tartessus: Herodotus, 1.163. Greek visitations to Tartessus about this time may provide the context for the Corinthian helmet found in the river Guadelet, near Jerez (Boardman, 1980:214), dated by Snodgrass (1964:24- 5) to c. 690-650 BC. Attic SOS amphorae, Cypriot bichrome pottery and Corinthian wares dated to the late eighth/early seventh century BC are also found in south-western Spain, but may have been carried by Punic merchants (Shefton, 1982:338-339). Thorough treatment and bibliography in Judice Gamito (1988); Niemeyer (1990); Rouillard (1991). On Iberian distribution of Castulo cups: Shefton, 1995:136.

¹⁰³ Thule may be Iceland, but it has been variously identified with the Faeroes, the Shetlands and Norway.

¹⁰⁴ Sherk, 1974:534-562 discusses the relationship between Roman military conquest and scientific exploration.

¹⁰⁵ Paassen, 1957:332

¹⁰⁶ The scientific bias of *On the Ocean* may have been the main reason why it did not survive. Lloyd, 1981:258 noted a disinclination to study difficult and scientific works in Late Antiquity

¹⁰⁷ Roseman, 1994:7-17

¹⁰⁸ See Strabo 7.3.1

¹⁰⁹ On Pytheas' scientific method: Stefansson, 1942:11-14. Used by Hipparchus: Dicks, 1960:29 and Eratosthenes: Fraser, 1972:537. On Strabo's methodology: Paassen, 1957:3-32.

¹¹⁰ 1935:10.

¹¹¹ 1947:125

¹¹² Roseman, 1994:1, 155. See also Heidel, 1937:108

¹¹³ See McGrail, 1983:300-318 on seamanship, navigation and celestial observations.

¹¹⁴ Pliny *NH* 5.9; Polybius 3.59.7

¹¹⁵ Walbank, 1972:126-127

¹¹⁶ Strabo 2.4.2

¹¹⁷ Cary & Warmington, 1963:48

¹¹⁸ Pytheas located a major source of amber, the island of Abalus, and noted that the Guiones, a German tribe, were selling it to the neighbouring Teutones (Pliny *NH* 37.35). He was probably recording the first stage of the amber trade, and its eventual journey southward to the Mediterranean basin.

¹¹⁹ Strabo 2.4.2 states that Dicaearchus referred to Pytheas. Dicaearchus, a pupil of Aristotle, flourished ca. 326-296 BC. This establishes a *terminus ante quem* for the publication of *On the Ocean*, which was obviously preceded by the voyage itself. Roseman, 1994:155 favours a date around 350 BC for expedition and 320 for the publication.

¹²⁰ Hatt, 1954.

¹²¹ Collis, 1984:126-127; Wells, 1984:125-140

¹²² Of interest is the analysis of Athenian bronze coins in the late fourth and middle third centuries, which shows a marked fall in the amount of tin used, from 13 to 6.5%. This could be interpreted as the gradual impoverishment of the Athenian state, or it may indicate rising tin prices owing to a diminution of supply: Michell, 1957:117.

¹²³ For distances: Hodge, 1983:80. When Pytheas had completed the circumnavigation of the Iberian peninsula, arriving off the Côte d'Argent, he realized that he was on the same latitude as his home port, Massalia, and that it was far shorter to travel overland parallel to the Pyrenees, than it was to sail: Strabo 3.2.11; compare 3.1.3. This is echoed in the *Ora Maritima* 146-150 (Avienus quoting the tradition of Pytheas?). Pytheas' gnomon readings helped establish the latitude of Massalia: Heidel, 1937:107; Dicks, 1960:179-181; Strabo, 1.4.4 [see note 54]

¹²⁴ Momigliano, 1975:58; Walbank, 1972:51. He lived for 50 years in Athens without leaving it: Bunbury 1959, I:602.

¹²⁵ Roseman, 1994:8; T23 (Pliny *NH* 4.104); T25 (Pliny *NH* 37.35)

¹²⁶ Diodorus cited Pytheas seventeen times: Brown, 1958:22. Diodorus' links to Pytheas through Timaeus: Roseman, 1994:19

¹²⁷ Brown, 1958:26; Mette, 1952:41

¹²⁸ Maxwell, 1972:297

- ¹²⁹ *Insulam mictim* is in the accusative: Ictis is the nominative form) Rivet & Smith, 1979:488
- ¹³⁰ 1958:27
- ¹³¹ Pliny *NH* 2.187
- ¹³² Pliny the Younger *Epistles* 3.5
- ¹³³ 1949: I, ix
- ¹³⁴ cf. *Ora Maritima* 99-107
- ¹³⁵ 1972
- ¹³⁶ 1983
- ¹³⁷ 1984
- ¹³⁸ Argentiferous copper ore from Devon was discovered at Hengistbury Head, Dorset, (within sight of the Isle of Wight): Bushe-Fox, 1915:72-74, indicating the conveyance of metals from the South West to central southern Britain was taking place in the Iron Age. It probably came by sea.
- ¹³⁹ Melville and Freshney, 1982:6, 129; Hamblin, *et al.*, 1992:86; White, 1921:168-169. Everard, 1980:7 writes of a rise in sea level of c. 100 metres.
- ¹⁴⁰ Rivet & Smith, 1979:487-489; see also Ridgeway, 1924:136
- ¹⁴¹ *NH* 4.16.103
- ¹⁴² Pliny seems unconscious of any duplication between Vectis of *NH* 4.103 and Ictis of 4.104
- ¹⁴³ *De vita Caesarum* 8.4.1
- ¹⁴⁴ *Geography* II.3.14
- ¹⁴⁵ Hibbert, 1822:103.
- ¹⁴⁶ *BG* 5.13. Mona was outside of his sphere of action, and an earlier source is implied (Rivet & Smith, 1979:117). This earlier source is probably Pytheas. See Roseman, 1994:77, 89-90
- ¹⁴⁷ From the Greek *κασσίτερος* (*kassiteros*) meaning 'tin'.
- ¹⁴⁸ 1695:1111-1112
- ¹⁴⁹ French: Kervran, 1971:25-27; Dion, 1952:307; Spanish: Monteagudo, 1954:84
- ¹⁵⁰ 3.115
- ¹⁵¹ *De Chorographia* 3.47
- ¹⁵² *NH* 4.22.119
- ¹⁵³ *Collectanea Rerum Memorabilium* 23.10
- ¹⁵⁴ *Geography* II.5 (Stevenson, 1991 ed.) described in the section dealing with Hispania Tarraconensis. On Ptolemy's pseudo-scientific method of assigning coordinates see Bunbury 1959,II:549-550.
- ¹⁵⁵ Dilke, 1987:190
- ¹⁵⁶ Ptolemy II.2.35; Pliny *NH* 4.13.96. From 1622 California was mapped as an island until Ferdinand VII of Spain issued a royal edict declaring it part of the mainland (Polk: 1991:398).
- ¹⁵⁷ See Herodotus 3.115.
- ¹⁵⁸ Polybius *apud* Strabo 4.2.1
- ¹⁵⁹ 3.5.11
- ¹⁶⁰ *Orbis Descriptio* 561. This identification was followed by Camden, 1695:1111: Hesperides = Tin Islands = Scilly Isles. The *Orbis Descriptio* was a pseudo-epic laced with mythological allusion (Thomson, 1948:229). In the twelfth century AD Eustathius'

Commentary resorted to Strabo 2.5.11 in order to explain Dionysius' remark. Eustathius, *The Paraphrase of Dionysius Periegetes*: 561: "At the Sacred Promontory ... are ten Cassiterides islands, near to each other and lying towards the north, which Dionysius calls Hesperides, because of their position, for they are in the west."

¹⁶¹ An island source of tin located somewhere in the Indian Ocean: *Ethnikon s.v. Κασσίτερα* (attributed to *Βασσαρικά*, a lost work of Dionysius Periegetes (Hadrianic?). See Rivet & Smith, 1979:87.

¹⁶² Pliny *NH* 4.103

¹⁶³ Thomas, 1985:149-151; Ashbee, 1974:277; Penhallurick, 1986:119-122. That the Cassiterides were producers precludes the hypothesis that the Scilly Isles were merely an entrepôt for goods in transit as suggested by Cary & Warmington, 1963:47.

¹⁶⁴ Chauris & Guiges, 1969: carte 1 & 3bis

¹⁶⁵ 2.5.11

¹⁶⁶ Line 97: "rich in their lodes of lead and metallated tin"

¹⁶⁷ Compare *Ora Maritima* 113-116 and Strabo 3.5.11.

¹⁶⁸ 1952:12; *BG* 2.34, 3.7-11

¹⁶⁹ Mommsen (1894:V,63) believed Caesar's legate crossed to the Cassiterides, which he saw as the Scilly Isles. Smith (1863:80) remarked that Crassus had discovered the Cassiterides after the time of Julius Caesar, but failed to realize that Crassus had perished in the Parthian War of 53 BC. Ridgeway (1890:11) and Holmes (1907:496) also supported this attribution.

¹⁷⁰ Rivet and Smith (1979:43); Cary and Warmington (1963:57); Unger (1883:164); Haverfield (1919:2331), Richardson 1986:159 and Davies (1935:42)

¹⁷¹ Crassus was consul in 97 BC and remained in Hispania Ulterior (Further Spain) until 93 BC: Richardson, 1986:192.

¹⁷² Strabo.4.2.1

¹⁷³ Caes. *BG* 4.20

¹⁷⁴ *BG* 5.12-14

¹⁷⁵ There is no reason to believe Caesar's geographical *excursus* was a later interpolation. Caesar based it on his reading of earlier writers: Nicolet, 1991:67.

¹⁷⁶ Mona in this context has been identified with the Isle of Man, because Caesar described it as being "in mid-channel" between Ireland and Britain. The traditional association is with Anglesey (Rivet & Smith, 1979:41).

¹⁷⁷ Caesar's Cantium is Pytheas' Kantion (*apud* Strabo 1.4.3). Bunbury, 1883: ii,128, n.9 sees 'night lasting thirty days' as a reappearance of the confused traditions about Thule. Cleomedes repeats the theme of a month-long day. Roseman, 1994:76, 106 suggests the source of Cleomedes may have been Hipparchus. Cleomedes also quotes directly from Eratosthenes and Poseidonius. Caesar could have used either of these sources, and actually cites Eratosthenes, *BG* 6.24. Hipparchus used Pytheas as a source on prolonged twilight (Dicks: 1960:103, fr.62: commentary, 186). Compare Pliny *NH* 4.16.104: commentary: Bunbury, 1883:I, 613-614. 'Mona' may go back to Pytheas, and is associated with the topic of continuous winter nights in Pliny *NH* 2.186-187: commentary, Roseman: 1994:75-79.

¹⁷⁸ *BG* 4.21

¹⁷⁹ *BG* 5.13, Suetonius, I, 58

¹⁸⁰ 1959:138-141

¹⁸¹ Caesar *BG* 5.13

¹⁸² BG 4.20

¹⁸³ BG 2.14; Frontinus, *Stratagems* 2.13.11

¹⁸⁴ 39.51

¹⁸⁵ 5.12 & 5.14

¹⁸⁶ BG 4.20

¹⁸⁷ BG 5.13; cf. Strabo 4.5.2

¹⁸⁸ BG 4.21

¹⁸⁹ BG 3.8; cf. Strabo 4.4.1)

¹⁹⁰ BG 3.9

¹⁹¹ 1.45 (19)

¹⁹² *Ad Att.* 4.15.10

¹⁹³ “In the summer of 54 BC, Quintus Cicero was in Kent with Caesar's expeditionary force. Quintus was a critic of historians and had written history himself: here he was, in the middle of great events taking place actually beyond the known world--an unparalleled opportunity which he did not intend to let slip. Cicero wrote to him in August (Cic.QF ii.16,4) ‘*You evidently have some splendid literary material--the place, the natural phenomena and scenes, the customs, the peoples you fight, and, last but not least, the Commander-in-Chief*’” (Wiseman, 1987:261)

¹⁹⁴ BG 5.8

¹⁹⁵ BG 5.23

¹⁹⁶ Caes. 47

¹⁹⁷ Pliny 9.57.116

¹⁹⁸ *Ad Fam.* 7.7.1; *Ad Att.* 4.18.5

¹⁹⁹ *Ad Att.* 4.16.7

²⁰⁰ *Ad Frat.* 3.1.10

²⁰¹ Strabo 1.4.3 writes ‘...*the men* who have seen Britain and Ierne do not mention Thule, though they speak of other islands, small ones about Britain’. It is difficult to know whom Strabo is referring to or what date they were active.

²⁰² Strabo 4..5.3