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Christina H. Roseman
Seattle Pacific University

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C. May Marston Lecture
Seattle Pacific University
February 21, 2001

“Common Markets?” Europe, Trade, and the Ancient
World

By

Christina Horst Roseman
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“Common Markets?” Europe, Trade, and the Ancient World
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Christina Horst Roseman, Ph.D.
C. May Marston Professor of Classics

Good evening, and welcome to this 8th annual Marston lecture. Over the years, my topics have ranged from drama and art to geography and philosophy, but my title tonight may seem an odd one for a classicist to have chosen. We tend to think that the free exchange of commodities over long distances is a modern development, and indeed this year's European Symposium will give us an opportunity to reflect on the ramifications of the newest forms of European economic union. Not since the Roman Empire was at its height have goods and people moved so freely as they are expected to when the Euro becomes standard currency for many states, and European borders are handled more like those between the U.S. and Canada. The existence of trade over long distances, however, far pre-dates even the Roman Empire.

My fascination with ancient travel and trade began when I was a child, with museum visits, the *National Geographic*, and stories from the Old Testament. Consider the story of Abraham.

His father came from Ur of the Chaldees (that's in southern Iraq), moved north to Harran (in Syria), and then Abraham himself left for the Land of Canaan (Lebanon, Jordan and Israel). He even went down to Egypt. I remember puzzling over a lot of details. How did he go: did he have maps? (When my parents traveled cross country they always had maps, and they made lots of comments about inadequate road signs) Were there roads? I knew there weren't black-top or concrete roads, and the pictures in my Bible made the countryside look very bleak, indeed. Surely the people he met spoke foreign languages: how did he buy food? (Even in a car one could carry only so much, and refrigeration was always a problem.) The *Geographic* said camels weren't domesticated until Moses' time, and Abraham probably used donkeys. The little donkeys looked very small, to carry enough supplies, and I tried to imagine my family walking all the way from Wisconsin to Washington: I couldn't. Did he have to get permission to travel in other peoples' lands? What clothes did he wear and how did he keep them clean?

Well, 57 years later I'm still asking similar questions. If the Sumerians of southern Iraq, back 3000 years before Christ, valued lapis lazuli so highly that many religious objects are decorated with it, and poets called it “the stone of heaven,” just how did they obtain it when their only source was a mountain more than 2000 miles away in Afghanistan? The ancestors of Homer's heroes put a similar value on amber, and buried impressive amounts of it as funerary offerings. Where did they buy it, and was it Baltic in origin? How would people who found amber along Baltic shores know that it would fetch a high price far to the south along the Mediterranean? Or was there (as Pliny in the 1st century of our era said) a source in the Adriatic, which was long ago exhausted?

The bronze objects from archaeological excavations that give the Bronze Age its name are made from an alloy of copper and tin. There are hundreds of thousands of tons of metal in the items stored in modern museums alone, representing vast amounts of original ore: mined, smelted and transported to manufacturing sites all over the ancient world. Just how was that done?

All of the lapis and amber, the pearls and carnelian, found in the ancient cities came originally from areas that did not share in the civilizations we call Mesopotamian or Minoan, Mycenaean or Etruscan. On the other hand, while we find bronze items everywhere from Ireland and Denmark, through central Europe and Egypt, Russia and the Middle East, sources for the copper and the tin ores are not available everywhere. Implied in the existence of these things where we find them, are trading contacts, with demand and exchange of goods. The motivation for production and the ability to transport must also be present. There are reciprocal effects on local areas as long as trade continues, and there is the potential for devastating economic or political results if it ceases.

Tonight I want to explore the subject of trade exchanges, briefly considering a variety of aspects, and concluding with a look at the impact of a specific situation.

Desire and Need both seem hard-wired in humans. Certainly by the time that people were farming in the ancient Near East both were motivations for some form of trade: out of innumerable examples, I think of two early Neolithic sites, both around 6000 BC, that already show signs of trade: Jericho, near the Dead Sea, and Chatal Huyuk in central Turkey. Both traded an unusual raw material with neighboring communities: salt from the Dead Sea at Jericho and obsidian from a nearby volcanic peak at Chatal Huyuk.

By 3100 BC there were many impressive cities throughout southern Iraq, where very little stone or timber for building or metal ores are to be found at all. These had to be laboriously transported from hundreds of miles away, yet the cities flourished.

The society that developed between the Tigris and Euphrates rivers was built on complex agricultural surpluses, in tandem with long distance trade. Objects recovered archaeologically from Sumerian burials and administrative buildings and residential sites all attest to an intensely commercial society providing both raw materials and finished luxury goods for exchange, both internally and over long distances. The need for careful records of such transactions brought about the invention of writing, and many of our earliest documents from these cities record trade between merchants.

We read of donkey caravans bringing ore from central Turkey, 800 to 1000 miles away, of shipments of grain sent from southern Iraq to a city somewhere in the northeastern mountains, and of timber brought in great rafts down the Euphrates from the Taurus mountains in the north and the Zagros mountains in the east. True, some of these products were obtained through force of arms: in the "Epic of Gilgamesh" the heroes killed the guardian of a cedar forest in order to get the precious wood, but to balance the dramatic accounts of poets we can point to the existence of trading enclaves like the Assyrian one at Kanesh in central Turkey.

Here generations of Semitic merchants had permission to live in a walled compound outside this Bronze Age city. It was a relationship similar to that enjoyed millennia later by Hanseatic Germans at Bergen in Norway. The Assyrians bought copper and gold, exchanging it for tin and fabrics and luxury items. Tin is a metal found

in few places, but necessary to create bronze. Both parties thus could manufacture this essential alloy.

By 2100 BC we can read the accounts of individual merchant families in Abraham's Ur, and track the price of various commodities from Bahrain and Oman and the Indus Valley. The economic risks and rewards they experienced would be familiar to businessmen today. There were concerns over the safety of shipments, complaints about the quality of goods provided by long-distance partners, anxiety over payments and debts. Likewise, successful merchants had to be able to predict market factors, and that depended upon accurate knowledge of the political circumstances all along their trade routes.

Occasionally we can even glimpse the information network helping to provide that knowledge. The ancient Near East was usually made up of smallish city-states engaged in continual attempts to dominate each other; the women of the ruling families were often exchanged to seal political alliances. Naturally, prestige required that they did not travel to a foreign husband alone, and the servants accompanying them usually retained contact with their homes. Some families kept up insistent correspondence to assure the well-being of their female relatives. By the 1800's BC one can deduce the presence of espionage and informers of various kinds. As it happens, the archives from Mari, an important kingdom on the upper Euphrates, include documents from the queen to her husband, and it certainly looks as if the lady contributed an important factor to his intelligence network.

That Assyrian trading community at Kanesh was the headquarters of a commercial guild, which operated throughout central Anatolia. It controlled treaty relations with local kings, regulated merchant activities and arranged for financing. This was commerce on a large scale: caravans ranged from 200 to 250 donkeys, each able to carry 65 kilograms of tin, or some 25 bolts of fabric.

Trevor Bryce, in his recent work, *The Kingdom of the Hittites*, points out that this lucrative trade contributed to the definition of local boundaries, and the development of cooperation between the small states of Anatolia. The tolls collected by each territorial ruler motivated keeping routes free of bandits and well maintained, since the Assyrians were too canny to operate in places where internal stability could not be guaranteed.

That stability was lost in the early 1700's about the time that Hammurabi began his covert rise to power at Babylon. The collapse of the trade which had been a critical element in the economy of Assur for over three hundred years brought political chaos, and Assyrian territory was soon absorbed by the crafty ruler of Babylon.

At Kanesh, according to Bryce, local rulers had tried to take control of the entire Anatolian enterprise, resulting in coups and warfare and disruption to the networks supplying both luxuries and essential metals. One suspects that this occurred first, then the Assyrians pulled back their agents, and further chaos resulted in Anatolia. At the very least, those involved in the production of bronze would have needed to establish new connections.

Our written documentation for Assyrian trade is in the Semitic dialect used at Assur, and inscribed on clay tablets. Kanesh itself doesn't seem to have left us such business documents, but a couple of decades after its destruction, a new power rose in central Turkey. This is called the Hittite Kingdom, and it was created by a people who seem to have been present in the population around Kanesh.

It is certainly interesting that the founders of what would become a might empire came from the Kanesh area, and it is not impossible that their ability to take over the main cities of central Anatolia was ultimately related to the loss of the Assyrian-Kanesh connection. The chronology is not precisely clear, but the attacks on Kanesh that destabilized the area undoubtedly created events that led to the rise of Hittite power. Likewise, the collapse of Assur's trading network weakened her for Hammurabi's take-over. One can conclude with certainty that the commercial ties seen in this situation had far-reaching implications for the local political and social structures of all parties involved.

Let us turn to Europe and the Mediterranean. By 6000 BC when farming villages that would become cities can be found throughout the Near East, there were also farming settlements across central Europe and in Britain. Even remote areas like the Hebrides and the Orkneys had settlement by 4000 BC, so we know that watercraft were being used confidently, whether these were rafts or skin boats or dugout canoes. In a number of places, modern archaeological techniques have recovered the traces of Neolithic fields. And we know that the familiar domesticate animals were present, and that farming methods were similar everywhere.

European farmers settled where rain and surface water were adequate, and they had already begun the process of clearing the continent of forests. Not all European soils were suitable for early tools, so populations tended to follow easy routes like river valleys that connected areas where conditions were favorable. For thousands of years the pattern is for small farmsteads scattered across the countryside, not the kind of urban centers that developed in the Near East. Such family farms would have been essentially self-sufficient until the emergence of bronze as the preferred material for tools. Then exchange systems came into play between the sites where ores were mined and smelted, and the local crafting of common bronze tools.

The Aegean area was Europe's main contact with the great cultures of the Near East, and water routes were in place before 2000 BC. On the island of Crete, administrative centers collected olive oil and wine in large quantities for redistribution. Crete sent products to Egypt and was in contact with Near Eastern ports, as well. When the Mycenaean Greeks entered the trade networks (about the time of Hammurabi's Empire and the rise of the Hittite Old Kingdom) tremendous amounts of raw copper as well as finished bronze were traveling the Mediterranean in cargo ships of considerable size. Olive oil, wine, fabrics, timber, ceramics and luxury products of all kinds were being exchanged in sea-borne trade. There were warships to protect merchant interest, and pirates intent on theft instead of honest payment.

Where all the ships engaged in such trade were built is not as clear. Byblos, on the Lebanese coast, almost certainly had shipyards because the Egyptians refer to "Byblos ships" as carriers in waters their own craft couldn't handle. Other coastal cities may have constructed their own ships, maintaining a work force with the specialist skills required, although the similarities in ship design shown in art have made me wonder whether the vessels themselves may not have been built for sale in Cretan or Cycladic shipyards. Less obvious items of trade would be the raw materials for sails and ropes, as well as the timber for construction. We do know that different woods were used for different part of ancient ships.

So many loom weights have been found in Mycenaean Greek sites that fabric production was obviously commercial; huge quantities of linen were produced. In addition to the fine weaves, dyed in complex patterns or embroidered, coarse sail cloth may well have been exported.

The period which marked the end of the Bronze Age throughout the Near East saw great unrest and population shifts over the entire eastern Mediterranean. Large fleets figure prominently in the surviving records. In Egypt, Rameses III defeated an invading navy drawn from many foreign peoples, and left a huge monument to his success. In text and pictures, the Egyptian artists showed the great sea battle, complete with careful distinctions in the equipment of the various enemy ships. The Trojan War belongs to this period as well, between 1200 and 1100 BC a time of raids and destruction, piracy and fleeing refugees, which reorganized the eastern Mediterranean. Trade networks which had been in existence for 2000 years collapsed.

In the chaos and the disruption of supplies of metal for weapons and tools, smiths developed the body of experimental knowledge needed to work iron satisfactorily. The skill of iron smithing spread with the peoples moving west and north, and with the new metal, exchange networks shifted to some extent as well. The raw iron ores were much more available than copper or tin had been. However, iron was less desirable for many household uses, and there was still much demand for bronze.

By the tenth century, when we have written sources again, new kingdoms have taken old territories. There are Israelites in Israel, Philistines (who are probably descendants of Mycenaean Greeks) and Phoenicians from Gaza to northern Lebanon, and Greek city-states all along the Turkish coast. In the 8th and 7th centuries, south Italy and Sicily were dotted by new Greek settlements: Naples, Marseilles, Nice, Ampurias in Spain and Cyrene on the African coast were all founded as Greek cities, and there were dozens of other sites in the same areas that exist today only as archaeological remains. In the east, Greek settlements flourished in northern Turkey on the coast of the Black Sea, and even in southern Russia.

These Greek cities are almost invariably in coastal locations, usually on a defensible promontory with a good harbor. Although most Greeks were primarily interested in Mediterranean connections, they could not afford to ignore the native populations inland. In fact, interest in commodities like grain, timber for ships, and metals (gold, copper, tin and iron) was a factor in Greek expansion. Thus, the small European farming settlements, moving from their own version of the Bronze Age into the Iron Age, came into regular contact with the Mediterranean peoples soon after 1000 BC.

Archeological work on European sites of this period testifies to vigorous and interesting cultural patterns native to central Europe. The main difference between the interior and the Mediterranean coasts (from a Greek perspective) was that Europeans lived in very small independent communities, not cities. The cultivated land displayed a mosaic of family farms with marked field systems, interspersed with the remains of the original forests.

After 1000 BC, more land was cultivated, population increased and settlements were occupied for longer periods. Agricultural methods improved due to crop rotation and the use of manure to maintain soil fertility, and plow shares, now sometimes made of iron, were better designed.

At the same time, there is an enormous increase in the production and circulation of bronze items, with bronze sickles representing the single largest use of the metal. There is also a high degree of standardization in the manufacture of all bronze items, testifying to communication between bronze workers. This is also true of pottery, but the ceramics were not produced by specialists; instead, one supposes markets where wares were exchanged and local producers who were part-time makers of ceramic items, could trade ideas. The graphite with which some designs were created was a major trade item and its glossy black contrast with local clays makes for handsome wares that can be found from France and Holland to Hungary.

In other words, while the material culture found in Late Bronze Age Europe is in many ways technologically comparable to what we find in the Near East, the lack of dense, urban population centers also means that the systems which developed in the Near East to *govern* such city-states, are missing in Europe. Naturally, so are the needs for written accounts, for specialization in most crafts, and for the usual forms of bureaucracy associated with ancient city-states. Without obvious benefits to be derived from huddling in cities, the inhabitants of Europe were content to maintain family farms and meet the neighbors at markets or the occasional assembly for some common purpose. One notes, however, that about the same time that populations begin to increase, there is also a well-documented increase in swords and axes.

Only where ores were mined do we have evidence for settlements of *specialists* around 1000 BC. No matter where the ores were available (in the Alps, the mountains of Bohemia and Carpathia, in west Britain and in Ireland), many skills were required: mining galleries required the construction of scaffolds, ores and supplies had to be transported, smelting processes were complex. At Hallstatt, the mining techniques developed for metal extraction were also adapted for large scale mining of salt. Salt and bronze (that is, chunks of the already alloyed copper and tin ready for fabrication of finished bronze) are the only items of long distance exchange in this period, besides graphite and the occasional bit of amber, shell or stone. As had been true in the earlier periods of European history, wealth was evenly distributed in ordinary settlements (there are no elite burials), but the graves at mining communities are noticeably richer than elsewhere: we have mining communities in which everyone shares in the profits.

At a very few locations luxury items were produced for the small elite, and there are a few indications of trade with the Mediterranean settlements to the south, but around 800 BC, when the Greek coastal settlements were beginning to spread throughout the Black Sea and the western Mediterranean, a core area in central Europe was developing that scholars call the West Hallstatt chiefdoms, and which produced very rich burials. It is apparent that a wealthy elite has emerged.

The establishment of Greek cities along the Mediterranean coasts of Europe had brought a new element to the existing patterns of trade. Some sought bronze and raw materials from natives in the interior in addition to exchanging good among themselves. Thus, Greek luxury goods like the thin-walled ceramics of Corinth and Athens, finished bronzes in styles that must have seemed very exotic to Europeans, and the wine that was so different from their familiar beers, began to move northward.

According to Peter Wells, the response in six locations across central western Europe was the rise of true commercial towns (three large settlements and three smaller ones) which came into being for the sole purpose of long distance trade, specifically for

Greek luxury goods. Their populations included farmers and merchants, as well as the specialist craftsmen, but Wells finds no evidence that these centers functioned as political centers or princely residences. And when the Greek imports ceased to arrive regularly, around 480 BC, they ceased to be desirable locations: their populations dispersed back into the countryside.

While they existed, their residents amassed vast wealth. The rich burials associated with the Heuneberg, Mont Lassois, and Hohenasperg include unique items of Greek manufacture that are treasures indeed. At Vix in the Rhone valley, near Mont Lassois, the tumulus grave of an aristocratic lady included Greek vases, a gold decorated bronze cauldron, and an enormous bronze krater. This vessel stands a full 4 ½' tall. The Greeks usually used such containers for mixing water and wine, but this one staggers the imagination. The workmanship is outstanding, and the technical skill evidenced by its construction is impressive.

Similarly exquisite objects have been found in the Hochdorf burial and those from Grafenbühl, rich burials associated with the other commercial sites of this brief period. It was brief: according to Wells, the Heuneberg existed as a large production center only about 150 years, and only the last 75 years show dependence upon trade with the Greek south. The site falls into abandonment shortly after those trade items are no longer present, and Wells has interpreted this to mean that the break in trade resulted from changes in the Mediterranean south which caused the demise of these first European towns: they lost their reason for existing when the acquisition of Greek luxury goods ceased to be possible.

All of these towns had been involved in bronze working, and some were also distribution centers for salt; as Wells remarks, we can only guess what other items were produced in sufficient surplus to be of interest to the Mediterranean. Presumably, the Greek suppliers of wine and exotic luxury items found more convenient sources early in the 5th c. The bronze at least may have been obtained from the Etruscan cities of northern Italy, for around 480 the Sicilian and south Italian Greeks defeated them in an important naval battle: it is possible that the result was greater access to Etruscan metal producing centers. In the same period, the eastern Greeks also defeated the Persian Empire, which may have given them access to sources not available earlier. Whatever the circumstances, Greek merchants largely ignored central European trade, and the centers which had existed to supply them faded away.

Europeans did not cease trading among themselves, of course, nor did their need for gold and bronze and salt and interesting luxury items disappear. The increasing use of iron for weapons and tools meant that bronze was reserved for jewelry and cook wares and metal items in which lighter weight, greater ease of working and the soft golden color were desirable. The older patterns of trade reasserted themselves, but the change did have repercussions.

The populations of western Europe, from the Atlantic coasts to Bohemia, experienced numerous dislocations in the 4th and 3rd centuries, which seem to have disrupted some of the routes along which metal ingots traveled. Much work has been done recently on the distribution from sources of ore (gold, copper and tin) in Ireland, Wales, Cornwall and Brittany, which suggests that the West Hallstatt chiefdoms had received raw metals traveling along the Loire valley. After the commercial towns

disappeared, power shifted to the Marne area, and a new route for the metals can be identified along the Seine.

However, the *literary* documentation for this trade, which is largely Roman, describes a third route, that heading south by water and then up the Garonne to connect with the Rhone valley. At the mouth of the Rhone, strategically located, is the Greek city of Massilia (Marseilles). And that brings me back to her most famous ancient citizen, Pytheas.

In the first Marston lecture, I summarized my work on this geographer/explorer who made an extensive journey into the North Atlantic. He circumnavigated Britain and reported on ocean conditions as far north as the Arctic Circle. The book he wrote on his discoveries survived only in a few quoted fragments, but those prove that his was an extraordinary trip. In my book on the surviving texts, I carefully limited my speculations, but I confess that the reason why he should have undertaken this trip at all has continued to nag at me. “Scientific curiosity,” or “the lure of the unknown” doesn’t convince me. I did suggest cautiously that a search for new trade routes might have provided some motivation for Pytheas, since native populations along the Rhone were in flux early in the 4th century BC. These tribal movements probably disrupted Massiliote sources for bronze.

In the most recent issue of the Oxford Journal of Archaeology, Barry Cunliffe presents new evidence for the routes over which Atlantic metals were transported. Cunliffe suggests that the Garonne route used by the Romans was established as a result of Pytheas’ published work; he concludes that Massilia was seeking a way to access the Atlantic sources, and Pytheas’ description of the peoples and places he observed provided a basis for developing this new route.

Greek merchants usually dealt through middlemen: the wonderful bronze artifacts and the containers of wine that went north into Europe passed through many hands before reaching their ultimate destinations. Likewise, that ingots of gold or copper or bronze reached a Greek smith does not mean that he had more than a vague idea of where the ores originated. Since most of the territory through which Atlantic metals passed was in native hands, I can easily imagine that enterprising Greeks would want to know how to reach the source when supplies were interrupted. That would explain Pytheas’ journey into the Irish Sea, but I am still left wondering about the motive to continue farther north, into the Scottish islands, and to return along the North Atlantic coasts.

Last summer I was able to travel part of his probable route for myself, and while I found no evidence to answer my question of “why?” I do feel more confident as to what he saw.

Let us suppose, then, that early in the 4th century BC, shocked by the disruptions that had sent thousands of Celtic warriors over the Alps and down into Italy, the merchants of Massilia found themselves cut off from previous sources of metallic ores and lucrative markets. The Etruscan producers of copper and bronze were in disarray, cities plundered and citizens mourning their losses in battles against the raiders. Inland up the Rhone valley, routes that had previously transported metals from the north had been cut by the dislocation of whole tribes.

Our Massiliote merchants had never known exactly where the mines producing the original ore were located, only that they lay in the northwest along the open ocean. Access to metal sources in the far eastern Mediterranean had been jeopardized by the

naval power of Massilia's rival, Syracuse, whose dictator was now allied with the Persian rules of Egypt; thus access to trade centers like Cyprus would have seemed dangerously unlikely. Perhaps it would be possible to gain access to those older *European* sources, if their location was precisely enough identified.

And so Pytheas set out to investigate. The later writer Polybius scornfully called him "an ordinary man," which implies that the journey had no special funding or official mission, but the tone of Polybius' comments is derogatory, so this cannot be considered certain. I believe that Pytheas sensibly took passage on vessels already engaged in coastal trade, with captains who knew the waters and the routes and the local protocols. If he passed through the Straits of Gibraltar, his first point of interest was undoubtedly the area of Cadiz (ancient Gadeira), which was the port receiving metals from Spanish mines inland. The trade into the Mediterranean, however, was likely still under Carthaginian control, and most scholars believe Carthage guarded it jealously. He needed to continue on northward.

Since Pytheas' account survives only in disjointed fragments, we lack most of his narrative, and must extrapolate a great deal. Archaeology helps in the reconstruction of the people in the landscape he traveled. We know that he carefully noted which people inhabited what territories, the crops they grew and the possibly valuable raw materials, as well as geographical features such as river systems and landmarks useful to sea borne navigators.

The tides and extreme water conditions he encountered (that is, extreme from the viewpoint of one familiar only with Mediterranean conditions) were carefully logged. So were other puzzling aspects of the lands along the ocean, such as the relatively temperate weather conditions. Those were especially troubling to later readers of his work, for they were familiar with the extreme winter cold north of the Black Sea, on the Russian steppes: why wouldn't it be just as cold when one went north in the Atlantic?

If Cunliffe is right that Pytheas set out to find the source for metals arriving from the northwest, then he found them in the Armorican peninsula. As we have seen, the main source of ores from Brittany was here, and the area also received ores from Britain, and probably Ireland, as well. We can be sure that the geography of the area was carefully noted and observations about local politics and life styles logged.

Pytheas would surely have been struck by the many ancient megalithic monuments of Brittany: 2300 years later they are still impressive. He saw them undamaged in a countryside of small farms and hamlets, grain fields and patches of forest punctuated by standing stones and burial tumuli. He would have seen people wearing warm tailored clothing, woven in twills and plaids with a bright range of colors, and heavy jewelry ornamenting both men and women. All the metalwork, with curvilinear designs, free-flowing and lacking recognizable human figures, probably looked undisciplined to his Greek eyes. Similar designs decorated the ceramic wares, which were coarser and not as thin-walled as those his own people used, lacking the glossy black and scenes of human activity that decorated the finest Greek pots.

Pytheas was not content to have investigated this European coast, however, and continued tracing the imports from Cornwall and Wales on into the Irish Sea. Cornwall is known to have been a major tin producing area, but unfortunately tin leaves almost no archaeological trace: it is so far down the periodic table that it is the first to oxidize away in the presence of any other metal. Consequently, our knowledge of this part of bronze

production is less precise than our understanding of the mining locations and techniques used for copper extraction. As he headed north, he encountered areas still known for their extreme tidal conditions: when I was in Douglas on the Isle of Man, the tide was 24', and I was told that it could reach 30' in winter. Since his trip probably took at least two years, he surely experienced winter storms.

He says he traveled all over Britain on foot. Here, as in Armorica, he found the usual Iron Age scattered farmsteads, cultivated fields alternating with forested areas, and much the same crops he had seen on the continent, only the ratio of one grain to another being different in response to local weather conditions. In boggy areas, and where rainfall was especially heavy, he found that harvested grains were stored in special small buildings raised off the ground (when the Romans came to Britain, they did the same thing: foundations of many of their granaries survive today). The peat bogs we find today throughout the British Isles were far less extensive when Pytheas was there, but they would have been strange to him.

One wonders what he made of monuments like Stone Henge, the Rollright Stones, and Casterigg. What were the explanations that local inhabitants gave him for their purpose or their age? The route he took as he went north is thickly scattered with megalithic monuments of all kinds, placed to dominate the countryside. This would have been even more obvious before the towns that sprawl today, for one thing Pytheas must have found very strange was the lack of large habitation centers. Did he assume, as many Greeks after him did, that all such remains had been constructed by Heracles on his wanderings, or was he able to grasp the idea that northern barbarians had a proud technological tradition of their own, one even older than Homeric legends, in spite of the fact they didn't gather in cities?

Along the coasts of Wales and Anglesey were burial mounds that can still be seen; in the Hebrides (probably a larger island then: Atlantic storms have eroded many of the outer coasts in the area) and on into the northern isles he went, where people built in stone, round brooch-like houses that gave shelter through winter storms. Along the coasts he would have found seabirds he had never seen before, and seals in colonies. Probably there were whales and walruses as well. In these islands, he found strangely unchanging temperatures, with a variation of only 15 degrees C. between winter and summer in the Shetlands.

He found ancient farming communities almost everywhere, and the well-established exchange of goods in trading networks. He observed the changes in light patterns over the months he traveled, and measured the sun's height above the horizon in the mist and fog of northern lands (as I did). Comparing these with similar observations in his own lands, he knew he had proved that the world was spherical. He tried to identify precisely the point around which the night stars orbited and concluded that there was no star at the pole—which was correct. Polaris didn't become the north star we use until centuries later. He went so far north that the local inhabitants had no name for the land beyond. He proved that Britain was an island by returning along the east coast, telling of amber islands and strange water conditions. Some elements of what he described survived for future generations to wonder at: most seemed too outrageous for belief.

If Wells is right that Hueneberg and Mont Lassois were true urban centers whose specialist population came together solely because of the prestige trade items coming

from the Greek Mediterranean, and that they ceased to exist when those items were no longer supplied regularly, then there is a certain irony here. Such trade with central Europe was never a major factor even to Massilia, and it was not traumatic for her to shift supplies to nearer markets. But when those markets became impractical through political shifts in the Mediterranean, and Massiliote merchants sought to contact the European chiefdoms again after a lapse of decades, they has disappeared: the “cities” were abandoned, and new warrior aristocracies were in place, along the Marne and the Moselle, and in Bohemia.

Furthermore, the memory of Mediterranean wealth and luxury items available in the south served to motivate Celtic raiding bands, to take them by force instead of investing labor in the creation of items for trade. In an odd sense, the merchants of the early Iron Age trade are to some extent responsible for the raids and invasions their descendents experienced in the 4th and 3rd and 2nd centuries BC. The partners on both ends of that 75 years of beneficial trade were permanently affected, both by its existence and its cessation. And Pytheas’ journey, if Cunliffe is right, was partly an effort on the part of Massiliote interests to bypass unpredictable Celtic middlemen and open trade directly with the British sources of metallic ores.

He may be right. Certainly by the time the Romans were in Gaul and Spain, the route by which copper and tin and gold came into Europe from the western isles was along the Garonne, and Massilia was involved. Some 150 years intervene, however, and the archeological evidence for Mediterranean products going the other way is not yet in place. Mediterranean politics by 300 BC made an alliance between Massilia and the newly emerging Roman state desirable, and all the ores Massilia needed were also available in Etruscan Italy. There is no evidence, so far, that Mediterranean oil or wine went north to Britain until the Romans added the island to their own empire. But Pytheas had a voyage filled with wonders to report on, whatever use was made of that report.

So—“common markets.” The term implies common interests and mutual benefits to be derived from the exchange of goods. These were obviously limited in the examples from the ancient world that I have cited. The mutual risks implied seem far more evident. The move toward greater European economic unity we see today is so different, even from the free exchange of goods that was possible in the Roman Empire, that comparisons have limited validity. But I hope that the degree of cooperation between ancient societies, shown by the examples I have mentioned here, offers confidence that we in the modern world will be able to do better. In a “common market” the benefits - and the risks - are shared.

References and Further Reading

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