

## The Greco-Roman Conception of the North from Pytheas to Tacitus

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### INTRODUCTION

In this attempt to outline the main phases in the unveiling of the north in terms of present-day research, we define "North" as all the regions bordering the Atlantic Ocean which Strabo contains in his expression "Paroceanitide"; i.e., northwest Gaul (including the province of Belgium), the Britannic Isles, Lower Germany, and the Scandinavian peninsula.

Between the time of Herodotus, who wrote about 500 B.C. that he had met no-one who had seen the sea which was reputed to be at the extremity of Europe and no-one who knew the Cassiterides islands,<sup>1</sup> and the time of Tacitus, who wrote in the *Life of Agricola*,<sup>2</sup> published in A.D. 98: "We have conquered the whole of Britain", there occurred a major event of historical and scientific importance — the voyage of Pytheas — which was an exploit never surpassed by any achievement of the Romans.

### THE SOURCES AVAILABLE

Latin and Greek literary sources are more common than is generally assumed. Apart from the systematic information of Strabo in his *Geography*, of Pliny the Elder in his *Natural History*, of Tacitus in his *Life of Agricola* and *Germany* and in several passages in his *Histories* and *Annals*, of Ptolemy,<sup>3</sup> or finally of the *Notitia Dignitatum*,<sup>4</sup> there are 50 other authors who give us a scattering of information.<sup>5</sup> The very works of the poets provide valuable information. For example, Martial speaks of the "exotic specialities" which reached Rome, and Seneca the Elder<sup>6</sup> transcribed 20 little-known verses of a flowery orator describing a North Sea tempest, which could be read simply as the flight of an unbridled imagination, but which in fact describes the fleet of Germanicus surprised by the great equinoctial tides on its return in A.D. 16.<sup>7</sup>

The problems of interpreting these texts lie in the wide geographical and temporal dispersion of the evidence, which makes a chronological order difficult to establish. — ethnographical motifs come and go in space and time — and, to mentalities open to magic and superstition, the stories of mythology mask the realities which astonished or terrified the Mediterranean peoples.<sup>8</sup>

Nor should epigraphs<sup>9</sup> as a source material be forgotten, for, at least in Roman times, they specify chronological events and evidence of the occupation of territories and they reveal the veneration felt for navigators such as Nehalennia.<sup>10</sup>

The increase in archaeological data, thanks to aerial surveys and underwater exploration, is helping towards a better understanding of ancient writings and a new appraisal of old material.

To these sources should be added the texts of the early Middle Ages which, especially in the case of records pertaining to worship, sometimes preserve the memory of prehistoric events.<sup>11</sup>

### BEFORE PYTHEAS

It appears certain today that the seas of the northwest — the Atlantic, the English Channel and the North Sea — have been sailed since prehistoric times,<sup>11</sup> not only by local populations but by navigators come from afar. There is archaeological proof for this in the geographical spread of the megalithic culture and further proof in textual allusions: for instance, one can quote Homer's indirect knowledge of the long circumpolar nights.<sup>12</sup> Without going so far<sup>13</sup> as to situate the Cimmerians in Cornwall<sup>14</sup> or as to place certain episodes from the *Odyssey* in the British Isles, we can accept that Homer's epic does reflect a certain amount of geographical, maritime, and meteorological knowledge probably passed by word of mouth amongst the sailors from distant parts, in particular the kingdom of Tartessos,<sup>15</sup> who encountered each other in various ports. It is known that the Phoenicians and, later on, the Carthaginians tried to secure control over this sea area for themselves, either by chasing off other Mediterranean sailors who followed them or by luring them deliberately into dangerous waters.<sup>16</sup> This is one reason for the classical authors' long ignorance of the northern regions.

### THE CONTRIBUTION OF PYTHEAS

Pytheas's journey has been much discussed and many guesses made as to his itinerary and places visited according to the time, speed<sup>16</sup> and means at his disposal. Did he reach Iceland, Norway, and the coasts of Germania? In which direction did he start his voyage of discovery and from which direction did he regain the Mediterranean? All these questions, including the political background of the Age of Alexander, which favoured Pytheas and the commercial and scientific aims of his expedition, have been treated at definitive length by R. Dion.<sup>16</sup>

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What is no longer in doubt today is the reality of Pytheas's voyage. Ancient writers constantly refer to it, mostly in an admiring fashion, including even Strabo who, echoing Polybius,<sup>17</sup> accuses Pytheas several times of lying<sup>18</sup> — either because he was irritated by his prestigious predecessor or perhaps, as R. Dion suggests, because of the unsuccessful designs of Rome on Great Britain.<sup>19</sup>

Some people might take the discovery of a stater from Cyrene<sup>20</sup> on a north-coast beach of Armorica as archaeological proof of Pytheas's voyage. Evidence suggests that it comes from a shipwreck but this isolated discovery, while providing grounds for reflection, is not sufficient proof that it came from one of Pytheas's ships which discovered Ouxisame (Ouessant) and the country of the Osismii: *testis unus, testis nullus*.<sup>21</sup>

The most remarkable contribution made by Pytheas was in the field of astronomy and concerns the representation of the world. The numerous Greek and Latin geographers who quote him — not all of whom can be named here — mention his observations on the position of the stars, the differing length of the days and nights, and the connection between the tides and the phases of the moon.<sup>22</sup> Pytheas prepared the ground and made possible Eratosthenes' system. He could have no higher praise than that of the great navigator Bougainville: "A skilled astronomer, an observant natural philosopher, an accurate geographer and a courageous seafarer, his voyages have contributed to the improvement of knowledge about the terrestrial globe."

We also owe to Pytheas a collection of practical observations:

- on marine life, the tides, the "marine lung" (that mixture of earth, water, and mist which so terrified the Mediterranean people), and the frozen sea, these last two ideas being designated apparently by Celtic words;<sup>23</sup>

- on sea monsters;<sup>24</sup>

- on the coasts and even on the interior of the country; its animal and vegetable (algae) life;<sup>25</sup>

- on the coastal populations, their way of life and their produce, their forms of worship and cultural influences.<sup>26</sup>

One can agree with R. Dion that Pytheas pursued his expedition in the spirit of the true explorer.<sup>27</sup>

But the Massaliot's "realia" were closely intermingled with nordic myths which extended over a very long period of history, even if there is no time here to make a proper analysis:<sup>28</sup> these legends were either about historical populations such as the Cimmerians or Scythians<sup>29</sup> or imaginary, such as the stories about the Hyperboreans,<sup>30</sup> the amber routes, and Thule (a vague term whose mythical importance explains the apocalyptic nature of the later Gothic migrations<sup>31</sup>) and Atlantis. A notable feature is the way localities are displaced following the enlargement of geographical knowledge. Ultima Thule is a homologue for Cerne.<sup>32</sup> In general, for all the topographical locations we shall consider that Roman representations centre on Rome, though we shall also take into account certain customs of speech common to seafarers.<sup>33</sup>

There is abundant literature concerning the peopling of the Ostimniens,<sup>34</sup> the Ictis islands,<sup>35</sup> and the Cassiterides<sup>36</sup> which became so important towards the end of antiquity.

#### FROM PYTHEAS TO THE TIME OF CAESAR

It appears that Pytheas's voyage had no lasting commercial advantages for the Greeks, probably because the favourable conditions which had helped the navigator from Massalia to force the passage through the Straits of Gibraltar no longer pertained. After Alexander's death the channel closed once more and only Carthage exploited the fruitful commercial trade of the Atlantic. Even after the collapse of the Metropolis this situation stayed the same for the colonies which subsisted for a time along the Spanish and Moroccan shores of the Atlantic.<sup>37</sup>

The best proof of this is demonstrated by the lack of success of Polybius's enquiry, made at Scipio's request, as to the north and south issues of the straits: the Gaul traders summoned together by the Romans<sup>38</sup> to give an answer to this either could not or would not furnish any information on the tin routes, perhaps because a mutual silence protected their obvious commercial interests against the danger of outside competition, or perhaps because they each travelled different sections of the route and none of them knew the whole trade route from one extremity to the other.

We can only guess that the traffic between Gaul and Great Britain was in the hands of the Veneti,<sup>39</sup> but it would explain the desperation of the Roman attempts to destroy their thalassocracy. The consequences of the defeat of the Veneti on the political and economic restructuring of west Gaul were far-reaching. The aerial photographic discovery of a sunken port at Talmont<sup>40</sup> raises the hypothesis that the main centre of Atlantic communications moved, after the defeat of the Veneti, to the Santones, which had supported Caesar<sup>41</sup> before passing very soon afterwards to Bordeaux.

#### CAESAR

What were Caesar's motives in landing in Great Britain<sup>42</sup> and in crossing the Rhine? There were the obvious military reasons, also the "right of pursuit" into "distant sanctuaries"; one should remember that the island, cradle of the Druids,<sup>43</sup> served as a refuge for Commius Atrebatas.<sup>44</sup> There were economic designs: the obsession with the rich trade in amber and tin. Suetonius also mentions pearls in Britain.<sup>45</sup> Parallel with this we should not exclude a genuine scientific curiosity in Caesar's case (witness Bonaparte's explorations in Egypt). However, the overriding reason was political:<sup>46</sup> to acquire the conqueror's prestige and to emulate Alexander by discovering new countries and annexing them, if possible, to his Empire.

#### THE JULIO-CLAUDIANS AND THE FLAVIANS

Under these dynasties geographical discoveries were brought about by wars.<sup>47</sup> Augustus appears to have had some projects concerning the island, but renounced them and contented himself with developing commercial links and trying unsuccessfully to annex Germania.<sup>48</sup> The northern reconnaissance expedition on which he sent his fleet, hoping to discover a Northeast Passage, ended in failure because of the

geographical factor, and the revolt of Arminius made him give up the hope of creating a greater Roman Germania. Caligula's northern ambitions were ridiculed at Rome.<sup>49</sup> Things were taken more seriously under Claudius,<sup>50</sup> but his successors, either through genuine feelings of pacifism<sup>51</sup> or more probably through negligence, abandoned the reins to freedmen,<sup>52</sup> which prevented Agricola from following through his gains. The various phases of this conquest are recounted by Tacitus in his *Life* of his father-in-law — even if his critical judgment as a historian, with regard to the imperial tyrants, is slightly coloured by family and national pride.<sup>53</sup> In spite of this limitation, it is impossible to overestimate our debt to his *Life of Agricola* and his *Germania*<sup>54</sup> for factual nordic knowledge at the end of the first century A.D.<sup>55</sup> These ethnographic monographs, generally based on first-hand information, are of exceptional interest to us today.

#### ROMAN POLICY

Before ending this rapid outline we cannot avoid bringing judgment to bear on the aims of Rome. The Roman occupation was of great consequence and highly structured, whether one considers the network of roads<sup>56</sup> or the system of fortifications and frontier zones, increasingly better known through archaeology.<sup>57</sup> It is evident that on the outskirts of the Empire, where large numbers of troops were stationed, the processes of Romanization and syncretism were likely to be furthest developed.<sup>58</sup> But it remains a fact: Rome stopped her advance on lines which do not seem to us today, with hindsight, to have been the best from a strategic point of view; for example, the Rhine, Hadrian's Wall, and the Antonine Wall. What Tacitus calls the *fata imperii*<sup>59</sup> should be recalled here. Perhaps a deep fear of the unknown was disguised behind a wish for peace.<sup>60</sup> Should one invoke the philosophical interpretation of the Stoics?<sup>61</sup> Certainly economic considerations came into account. Strabo reflects the official point of view when he says he is only interested in inhabited regions, for which we should read "inhabited by settled populations". Northern Britain and Germania above all were occupied by people who were still more or less nomadic and difficult to pin down. For the Romans, as for a Greek like Strabo, more of a chorographer than a geographer, being interested in human and economic geography as a means of serving policy, the limits of Roman culture only took into consideration the part of the known world which was deemed "useful".

#### A SUMMARY OF ROMAN KNOWLEDGE

How should Roman knowledge of the northwest frontiers of her Empire about A.D. 100 be assessed?

— There were the trade routes for amber and minerals (tin, lead, and silver from Britain),<sup>62</sup> the slave traffic, and some nordic "specialities".

— There were the men who travelled between the northern territories and the centre: soldiers and traders, not all of whom traversed the whole distance, sailors,<sup>63</sup> envoys and pilgrims visiting distant holy places,<sup>64</sup> whose protective gods were fervently venerated.<sup>65</sup>

— There were a few pioneers in search of profits and, above all, merchandise passing from one market to another, sometimes going far beyond the frontiers of the Empire.<sup>66</sup>

— There were the men of letters who lauded the exploits of the travellers and the victories of the conquerors.<sup>67</sup>

Inversely, the northwest regions knew about the "centre of power" even in earliest times, as the mosaic patterns ornamenting certain Roman villas attest to an acquaintance with the *Aeneid*.

#### RESEARCH PROSPECTS

There seem to be two approaches:

1) On the one hand, there is considerable development in archaeological research in the northwest provinces, using modern scientific processes and encouraged by wide participation on the part of the local populations passionately interested in the search for their origins.<sup>69</sup> This research increases our knowledge of the extent of civilization of these pre-Roman peoples and their long contacts with the Mediterranean world<sup>70</sup> as well as of the intensity of the occupation and exploitation of the regions incorporated in the Empire, and the Romanizing procedures which ended, in the most successful cases, in a merging of the two cultures. Studies in historical geography and toponymy,<sup>71</sup> and aerial archaeological discoveries, reveal the traces of military conquest in the countryside.<sup>72</sup> Recent research has uncovered evidence of types of exploitation long unsuspected because of the nature of the remains, such as fisheries, salt production, and salting industries.<sup>73</sup> These finds specifically concern sea and trade voyages: the painstaking inspection of the coasts,<sup>74</sup> of the discovery of sea level,<sup>75</sup> of oceanographic data,<sup>76</sup> of ports and their topography,<sup>77</sup> and of prehistoric relics<sup>78</sup> of Celtic<sup>79</sup> or Roman<sup>80</sup> vessels are all further exemplified by ongoing ethnographic studies.<sup>81</sup>

Underwater archaeology, though difficult to carry out in the ocean, shows a very early triangular relationship (from the second century A.D.)<sup>82</sup> between Britain and the provinces at the mouth of the Rhine.<sup>83</sup> Maps which show in detail the distribution of these finds, such as the porous ceramics or "céramique à l'éponge",<sup>84</sup> allow us to understand these trade exchanges and their evolution as well as the conquest itself.<sup>85</sup>

2) The researcher of classical antiquity is directly concerned not only with all that touches upon the late Roman Empire and its destruction by the waves of invasions, but also with certain threads which draw him to the early Middle Ages, particularly the history of the Christianization of these provinces and the transcribing of the native myths by the Irish monks.<sup>86</sup>

This rapid survey of sources leaves us with the impression that, although gaps do occur, there is a certain continuity.

#### NOTES

<sup>1</sup>III, 115. Cf. R. DION, le Danube d'Hérodote, *R.Ph.* (1968) XLII: 7-41: Herodotus did not know the outline of middle and northern Europe west of the meridian passing through the base of the Adriatic. Polybius is scarcely more advanced; cf. Athénée, *Deipnosophistes* VIII:322 a b: the part of Europe to the north of a line joining the Narbonne (Aude) to the Tanais (Don) is unknown, according to Polybius.

<sup>2</sup>Agricola 33: *inuenta Britannia et subacta*.

<sup>3</sup>Cf. A.L.F. RIVET, Ptolemy's Geography and the Flavian Invasion of Scotland. *Studien zu den Militärgrenzen Roms* (Köln, 1977) 2:45-64; also J.J. TIERNEY, Ptolemy's Map of Scotland. *J.H.S.* (1959) LXXIX:132-148.

<sup>4</sup>Cf. J.H. WARD, The British Section of the Notitia Dignitatum: An Alternative Interpretation (1973) *Britannia* IV:253-263.

<sup>5</sup>A more or less complete inventory of these sources can be found in the anthology of E. COUGNY, *Extraits des auteurs grecs concernant la géographie et l'histoire des Gaules*; in A. MOLINIER, *Sources de l'histoire de France* (Paris, 1901); and in other authors interested in Pytheas, notably G.E. BROCHE, *Pythéas le Massaliote, découvreur de l'Extrême-Occident et du Nord de l'Europe (IV<sup>e</sup> siècle av. J.-C.). Essai de synthèse par les textes* (Paris, 1936); also J.C. MANN and R.G. PENMAN, *Literary Sources for Roman Britain* (London, 1977).

<sup>6</sup>*Suas.* I, 15 (quoted and translated by H. BARDON, *La littérature latine inconnue* (Paris, 1956) II:70: "For a long time they saw the day and the sun gradually disappear behind them; they have driven back the known limits of the universe").

<sup>7</sup>Tacitus, *Annals* II, 23, 24.

<sup>8</sup>Cf. *infra*, "marine lung". See K.E. MUELLER, *Geschichte der antiken Ethnographie und ethnologischen Theoriebildung* I (Wiesbaden, 1972).

<sup>9</sup>Cf. R.G. COLLINGWOOD and R.P. WRIGHT, *The Roman Inscriptions of Britain. I. Inscriptions on Stone* (Oxford, 1965). (Also in *Britannia* (1979) p.ex. X:339-356.

<sup>10</sup>Cf. P. STUART, A new temple of Nehalennia: a preliminary report. *O.M.R.L.* (1971) LII:76-78; De Kerk van Domburg als Nehalennia-museum, 1647-1866. *Mél. Brunsting* (Bussum, 1973), 367-378; H. WAGENVOORT, Nehalennia and the souls of the dead. *Mn.* (1971) XXIV:273-293.

<sup>11</sup>Cf. B. CUNLIFFE, *Iron Age Communities in Britain...until the Roman Conquest* (London and Boston, 1974); E. SERRA RAFOLS, Sobre los medios primitivos de navegación en el Atlántico. V Congreso Nacional de Arqueología, Zaragoza, 1957 (1959), 87-90. R. DION considers that the Protohellènes sailed as far as Great Britain, Tartessos, l'Océan homérique et les travaux d'Hercule. *R.H.* (1960) 224:27-44; cf. A.C.F. (1961-62), 243 (the Mycenaean from the fourteenth century).

<sup>12</sup>*Od.* XI:13, 19: "We reached that part of the Ocean of very deep currents where the Cimmerians have their country, their town. They live in clouds and mists that the sun never pierces...a funereal darkness weighs over these people". XV:460: the first mention in literature of amber beads in northern Europe.

<sup>13</sup>Neue Erkenntnisse zur Geographie Homers. *Rhein. Mus.* (1926) LXXV:266-287; *Geographische Zeitschrift* (1925) XXXI:293, (1926) XXXII:290; *Petermanns Mitt.* (1926) LXXII:66-68, 164-166 (The voyages of Ulysses are transferred to the Ocean).

<sup>14</sup>*Das enträtselte Atlantis* (Stuttgart, 1953); *L'Atlantique retrouvée?* (Paris, 1954).

<sup>15</sup>Cf. Herodotus, IV:152: A Samian at Tartessos about 630 B.C.

<sup>16</sup>A.C.F. (1962-63) 383-403; (1963-64) 398-410; (1964-65) 429-443; (1965-66) 457-474; (1966-67) 455-478; (1967-68) 461-498; (1968-69) 503-518. La renommée de Pythéas dans l'Antiquité. *R.E.L.* (1965) XLIII:443-466. Pythéas explorateur. *R.Ph.* (1966) XL:191-216. Où Pythéas voulait-il aller? *Mélanges Piganiol* (Paris, 1966), 1315-1336.

<sup>17</sup>II, IV, 1, 2: "This is what Pytheas tells us...but Polybius replies that there is something incredible in all this: for an ordinary poor man to be able to find the means to navigate and make his way over such enormous distances".

<sup>18</sup>I, IV.3: "Pytheas who has told us his stories about Thule has certainly shown that he is the most untruthful of men"; I, IV.4; II, I.18; II, V.8: "Pytheas maintains that...Thule is the last of the inhabitable lands...but other writers say nothing about this...having deceived people, Pytheas has lied in a way"; IV, IV.1, 2; IV, V.5: "he has lied

the most about the countries which are furthest away"; VII, III.1: "Pytheas has uttered lies about countries bordering the Ocean".

<sup>19</sup>*La Géographie d'Homère inspiratrice de grands desseins impériaux. B.A.G.B.* (1973) 463-485; *Aspects politiques de la géographie antique* (Paris, 1977).

<sup>20</sup>Un statère d'or de Cyrène sur la côte du Finistère. *C.R.A.I.* (1960) 317-323; Une monnaie d'or de Cyrène sur la côte Ouest de l'Armorique. *Arch. Arm.* (1961) 25-39.

<sup>21</sup>No less mystifying is the find of two Punic coins in the Azores. Cf. J.M. GOMEZ-TABANERA, Hallazgos monetarios del mundo antiguo en las Islas Azores: un problema heurístico. *Numisma* (1978) XXVI:201-208.

<sup>22</sup>E.g. Cléomède, *Du mouvement circulaire des corps célestes*, I, 7 (at Thule with reference to Pytheas: "the entire circle described by the sun at the summer solstice is above the horizon...when the sun is in the sign of Cancer, daylight lasts a month"); Geminus of Rhodes, *Elements of Astronomy*, C.VI: "Pytheas states in the account of his ocean voyage: the barbarians showed us where the sun set...For in these parts it happened that the night was quite short, for some people 2 hours for others 3, so that the sun having set would rise again after a short interval"; Marcianus VI: "the sun in its descent at the time of the winter solstice creates the horror of 6 months darkness, as Pytheas claims to have discovered in the island of Thule"; cf. Pliny the Elder, *Natural History* II, 75, 99 (tides in northern Great Britain) and IV, 30, with reference to Pytheas; Plutarch, *Sayings of the Philosophers*, III, 16. Strabo himself admits (IV, V.5): "Concerning astronomy and mathematics, Pytheas seems to have shown ability" (cf. VII, III.1).

<sup>23</sup>Strabo II, IV.1: "Pytheas also speaks of the waters around Thule and of those places where land properly speaking no longer exists, nor sea nor air, but a mixture of these things, like a 'marine lung', in which it is said that earth and water and all things are in suspension as if this something was a link between all these elements, on which one can neither walk nor sail." Cf. Pliny, *Natural History* IV, 30: *mare concretum*, frozen sea, called "Cronian sea" by some; Tacitus, *Germany* 45: *Trans Suionas aliud mare, pigrum ac prope immotum et Himilcon* (fifth century B.C.) in Avienus, *Ora Maritima*, 113-129, 406-415.

<sup>24</sup>Cf. Pliny, *Natural History* IX, 4:8; 5:9-10.

<sup>25</sup>Cf. references in Avienus, *supra*, n. 23.

<sup>26</sup>Part of this culture was to be maintained by the island Druids.

<sup>27</sup>The section "Pythéas Massiliensis" in the *Année Philologique* has a bibliography on this voyager.

<sup>28</sup>An outline can be found in R. CHEVALLIER, Les mythes ou le temps de la protohistoire. In: *Mélanges R. Dion* (Paris, 1976) 29-54.

<sup>29</sup>Cf. J. RAMIN, Les Cimmériens d'Homère. *Caesardunum* XV bis (1980) 1-10.

<sup>30</sup>Cf. R. DION, La notion d'Hyperboréens, ses vicissitudes au cours de l'Antiquité. *B.A.G.B.* (1976) 143-157.

<sup>31</sup>Cf. S. BOSCHI BANFI, Note sulla Tule. *Num. Ant. Cl.* (1976) V:291-299; and J. GUYONVARCH, Remarques sur le nom de Thulé. *Ogam* (1970-73) XXII-XXV:283 (a word of Celtic origin, the traditional designation of the Other World, following a polar conception of origin common to all Indo-Europeans).

<sup>32</sup>Cf. J. RAMIN, Ultima Cerné. *Mélanges R. Dion* (Paris, 1974) 439-449. See also R. SENAC, Le périple du Carthaginois Hannon. *B.A.G.B.*, IV s. (1966) V:510-537.

<sup>33</sup>Cf. R. DION, Sur l'emploi des mots ulterior, superior, *infra* dans les passages du *De Bello Gallico* relatifs à la Bretagne et aux expéditions de César dans cette île. *Latomus* (1963) XXII:191-208.

<sup>34</sup>Cf. F. LASSERRE, Ostréens et Ostimniens chez Pythéas. *M.H.* (1963) XX:107-113.

<sup>35</sup>Cf. R. DION, Le Mt-St-Michel de Penzance. *A.C.F.* (1968) LXVIII:502-518; Transport de l'étain des Îles britanniques à Marseille à travers la Gaule pré-romaine. *Actes 93<sup>e</sup> Congr. Soc. Sav.*, Tours, 1968 (Paris, 1970), 423-438; Une erreur traditionnelle à



<sup>78</sup>T. WATKINS, A prehistoric coracle in Fife. *I.J.N.A.* (1980) IX.4:277-286 (boat made from skins found in a Bronze Age necropolis, links with other discoveries and today's coracles in the estuaries of Wales).

<sup>79</sup>G.J. MARCUS, Factors in early Celtic navigation. *E.C.* (1953-54) VI:312-327; D. NASH, A bronze coin from the boat of Cunobelinus, found at Canterbury (Kent). *B.S.F.N.* (1978) XXXIII:359-360.

<sup>80</sup>M.D. de WEERD, Römerzeitliche Transportschiffe und Einbäume aus Nigrum Pallum/Zwammerdam. *Studien zu den Militärgrenzen Roms* (Bonn, 1977) II:187-198; Ships of the Roman Period at Zwammerdam/Nigrum Pallum, Germania Inf. In: *Roman Shipping and Trade* (London, 1978), 15-21; P.R.V. MARSDEN, A boat of the Roman Period found at Bruges, Belgium in 1899, and related types. *I.J.N.A.* (1976) V:23-55.

<sup>81</sup>Cf. above note 78.

<sup>82</sup>G.C. BOOM, A Greco-roman anchorstock from North Wales. *Ant. J.* (1977) LVII:10-30.

<sup>83</sup>Cf. *Britain and the Rhine Provinces* (London, 1973); and *Roman Shipping and Trade* (London, 1978).

<sup>84</sup>Cf. P. GALLIOU, M. FULFORD and M. CLEMENT, La diffusion de la céramique "à l'éponge" dans le Nord-Ouest de l'empire romain. *Gallia* (1980) XXXVIII:2, 272; M. CLEMENT and P. GALLIOU, Céramique romano-britannique dans le Morbihan. *Archéologie en Bretagne* (1981) 30:39-43. See also L. HARMAND, À propos d'un col d'amphore trouvé dans la Manche. *Mélanges Carcopino* (Paris, 1966), 477-489; and M. REDDE, La navigation au large des côtes atlantiques de la Gaule à l'époque romaine. *M.E.F.R.* (1979) XCI:481-489.

<sup>85</sup>Cf. B.R. HARTLEY, The Roman occupation of Scotland. The evidence of Samian ware. *Britannia* (1972) III:1-55.

<sup>86</sup>Cf. R. DION, Rapports du commerce du vin avec les itinéraires atlantiques dans l'Antiquité et au Moyen Age jusqu'au XII<sup>e</sup> s. *C.R.Ac. Agr. France* (1954) 40(15):55-59; C.J. GUYONVARCH, Remarques sur le nom de Thulé. *Ogam* (1970-73) XXII-XXV; F.M. LE ROUX, Les îles au Nord du Monde. *Hommages Grenier* (Bruxelles, 1962) 2:1051-1062 (Procopé signale encore au IV<sup>e</sup> s. la survie de la légende d'îles des morts); A.A. LEWIS, Le commerce et la navigation sur les côtes atlantiques de la Gaule du V<sup>e</sup> au VIII<sup>e</sup> s. *Le Moyen Age* (1953) LIX:249-298; M. LOMBARD, *Espaces et réseaux du Haut Moyen Age* (Paris-La Haye, 1972); J. MARX, *Nouvelles recherches sur la littérature arthurienne* (Paris, 1956, 1965); *Les littératures celtiques* (Paris, 1959). Dans le cycle des rois, Conn arrive à l'île des Fées sur un coracle, Bécuna traverse la mer sur un coracle recouvert de peau. Thilé (Thulé) et Pithias (Pythéas) sont cités dans *Percef.* I, 1, Thilé dans Lanzelet (*H.L.F.* XXII:211-223; *Romania* X:471-476).