W.M. Leake: a contemporary of P.O. Brøndsted in Greece and in London

by Christopher L. Witmore & T.V. Buttrey

Introduction: The case of Leake

Among the Western Europeans who traveled to Greece in the early nineteenth century was one whose purpose was unusual: William Martin Leake (fig. 1) arrived as a military spy. But he went on to become, like Peter Oluf Brøndsted, a major figure in the development of Classical archaeology. His case provides an illuminating parallel to that of Brøndsted, of whom he was the exact contemporary.[1]

Leake is often regarded as the father of Classical topography.[2] His work, to be sure, set the standard for subsequent scholarship and as such became a base for further topographical research throughout the 19th and 20th centuries.[3] Among both contemporary and subsequent scholars Leake, by all accounts, had few if any imperfections. Ernst Curtius, in his *William Martin Leake und die Wiederentdeckung der klassischen Länder*, characterized Leake as having "distinguished himself among all his contemporaries by the great, thorough cohesion of his projects, by the methodological and expansive nature of his travels, by his sense for history as well as by the technique/skill, which he brought to his projects from his training as an engineer and military topographer".[4] Leake was also a diplomat, a geographer, an antiquarian, a keen literary scholar, and a numismatist. But there is so much more.

We cannot hope to understand why such a key figure was so effective if we consider him only in isolation, even given the amazing versatility of the man, i.e. Leake the diplomat; the military geographer on the ground; the antiquarian in the cabinet; the numismatic scholar in the study. Instead, we are interested in what associations, institutions, instruments, media, and so on come together to co-constitute the settings and materials of Leake's antiquarian, topographical and numismatic work. The activities behind this work are distributed and dislocated. There are multiple sites, numerous actors, and countless mediators which impact, facilitate, translate and amplify Leake's practices, whether on the ground or in the study, in the course of co-producing his well known tomes. His topographical survey was situated within a mixed and fluctuating set of connections. His work in London occurred within a dense network of influential relations – whether with politicians, military personnel, other antiquaries or with books in libraries, maps in chart rooms, geometrical calculations sent via correspondence.

Understanding how key figures such as Leake produced, acquired, and circulated knowledge is a fundamental aspect of understanding why we as Classical archaeologists continue to do what we do in the way that we do it, and do it so effectively. Leake is of interest precisely because he was working within the midst of continually negotiated models of what constitutes scientific and scholarly knowledge. Out of this noise, prior to a quieting into specialized fields, Leake's work provided a template to standardization in fields such as Classical topography, and was therefore crucial within the movement toward professionalization within Classical archaeology.

1. The present chapter has benefited from the helpful comments of Malcolm Wagstaff.

2. Eliot 1996; Wagstaff 1992; Also refer to Stoneman 1987.

3. Examples include Clark 1858, viii; Curtius 1851-1852; Forster 1907; Grundy 1896; Pritchett 1965; Ramsay 1890.

4. Curtius 1876, 245.

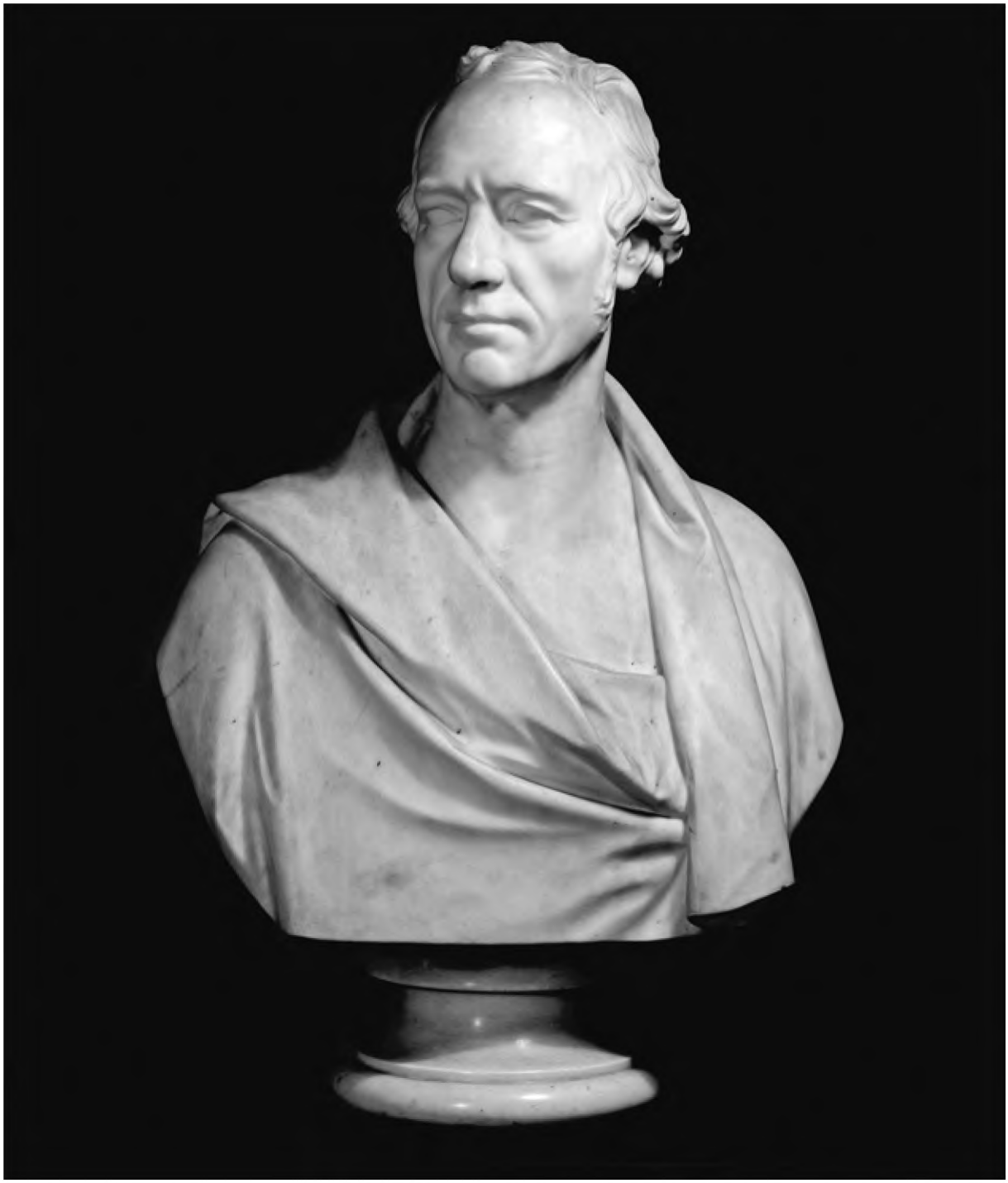

Fig. 1: Bust of Col. William Martin Leake (1777-1860), 1840, by William Behnes (1795-1864), The Fitzwilliam Museum, Cambridge University.

Our approach requires a fair bit of travel between Greece and England, between the first decade of the 19th century and the 1830's and 1840's. In accentuating a bewildering array of actors and relations we move through specific scenes both in Greece and in London. Through this complex, nonlinear sketch of Leake's work we aim to investigate how the modes of engagement and the standardized templates, which come to be central to particular archaeological relations with the material pasts – whether landscapes, sites or coins – so familiar to Classical archaeologists today, play out across multiple fields of knowledge co-production.

The Greek Morea 1805

The 22nd of February. After a five-hour sail under a 'strong northerly breeze' from Zante (modern Zakynthos) William Martin Leake arrives at the port of Potámi, situated at the mouth of the Peneius river which was known in the early 19th century as the Gastúni. Holding letters of correspondence with a Dr. Sessini, Leake walks, not without some difficulty, across a marshy maritime plain to a town by the same name, Gastúni. Here, Leake is received by the Physician.

Leake describes a number of large trenches, which were formed in the excavation of clay for the manufacture of the mudbrick used in the construction of houses in the village. In the depths, stagnant pools of water collect and these render Gastúni as very unwholesome in the summer months. The unhealthy air contributes to the 'good doctor's' trade. Sessini is the last of three brothers, all physicians, to remain in the village.

Gastúni is described as a crowded town of some 500 houses, half "Turkish", half "Greek" – i.e. in Leake's terminology, non-Albanian Muslim and Christian respectively. Each house is surrounded by either a yard or a garden, the latter often shaded by orange or cypress trees. Leake deplores the plains of Elis, renowned for their fertility in antiquity, but now a desert, which in the areas surrounding Gastúni are under little cultivation – "buffalos, sheep, and oxen enjoy the rest of the plain".[5] Leake hints that the current proprietors, the heirs of the recently deceased Hassán Agá, might do more to counter this present state of deprivation. These heirs include: "namely, his son Bekír Efféndi, who is now at Gastúni, and a nephew, Shemseddín Bey, who is at Constantinople, – to him Castel Tornese belongs; Ismaíl Efféndi, the Vóivoda, who purchased the Dhekatía, or tithe, and customs from the Porte for three years, in the usual manner, is said to be a cipher compared with Bekír Efféndi".[6]

Leake continues by discussing the villages of Pyrgo, whose inhabitants are predominantly Greeks, and Lalla, whose population, save a small number of shopkeepers, are Muslims. Mustafá Agá, the Vóivoda – a term which might be loosely rendered as town governor – of Pyrgo and his brother Seid Agá of Lalla can mobilize 500 to 600 men in the field.[7] The region between the plain of Gastúni and Lalla is hilly and covered in pine. Large quantities of tar, wine, grains, and some oil and silk are produced here.

The 23rd of February was the second to last day of Carnival. Leake describes the hill of Kaloskopí, the site of ancient Elis, which the Venetians called Belvedere – a name, which they fittingly applied to one of the five districts of the Morea. In a village at the foot of the hill, Paleópoli, Leake is brought upwards of 100 coins turned up by the plow; a couple are Venetian, maybe Dalmatian, the rest Greek. Strabo, Pausanias, Diodorus, "a scholiast on the Odyssey", and coins come together with features on the ground in his discussion of the site. Soon, Leake's discussion segues into sources of drinking water and the ports of the district. Revenues from the Mukatá (proprietary holdings) of the district of Gastúni, comprised of a combination of tithes, customs fees and taxes; agricultural produce: flax, wheat, maize, the dhurra of Egypt and cotton,

5. Leake 1830, I, 2.
6. Leake 1830, I, 3.
7. The 'field' should be read as carrying a dual valence by having both agricultural and military connotations. Witmore 2004.

growing seasons, farming practices and implements: svárna, plough and share, land tenure, shepherding methods including the estimated numbers of sheep and goats – 300,000 in the district of Gastúni, cheese making, sheep-shearing and costs of livestock, among other matters of concern, round out the day's entry.

Here, in the very first days of Leake's mission in the Morea, topography, politics, economics, archaeology, Classical literature, and horticultural practices are all blended together in his travelogue.[8] All of these relate to a genre of descriptive geography, which served military aims. Later all of them would serve Leake's studies in the history and archaeology of the ancient world.

Fearing French military designs upon the Grecian frontier of the Turkish Empire, the Foreign Office had dispatched Leake, a Captain in the Royal Artillery, to gain more accurate and credible geographical knowledge of Greece "... you will pay particular attention to the general geography of Greece with a view to acquire for the British Government and nation, a more accurate knowledge than has yet been attained of this important and interesting country ...".[9] But in dealing with something as complex as a country such as Greece at such a distance from London, how was such an operation to be accomplished? What does one observe? How does one describe? What are the criteria for this descriptive geography?[10]

So Leake went out as a military spy. His orders were unequivocal. He was to make himself "acquainted with the Western coast of Albania and the Morea" and, above all, those areas proximate to the Italian coast, especially ports, landing facilities and fortifications.[11] In step with this, Leake was to suggest to the Turkish commanders "any improvements for the defense".[12] Along with the "servant" (his English valet) whom Leake met up with in Zante, he was to "take surveys, and lay down plans of the same places".[13] Once these coastal areas were sufficiently (precisely) mapped, Leake and his valet who doubles as his surveying assistant and who is never mentioned by name were to proceed to the interior "for the purpose of acquiring that general knowledge of the face of the country ... and, in particular, to take notice of the roads and passes leading towards Constantinople on the one side and the Morea on the other".[14] Areas, features and things of note also included any defensive facilities (especially "fortresses of Venetian construction"), potential obstacles (including the depths of river crossings or difficult passes), points of vulnerability and every kind of resource: resources consisted of everything from dates, olives, goats, cattle and the associated revenues, to munitions, saltpetre (useful in making gun powder), sources of freshwater and even antiquities. Leake was also to "report the political and military dispositions of the inhabitants" including potential troop numbers, and to liaise with important officials.[15] These military concerns were to be his primary guide as to what to observe, what to describe, on the ground.[16]

The Collection

An important material manifestation associated with Leake's seemingly limitless interests was the personal collection of antiquities, which he began to assemble with what must have been random acquisitions as he traveled. Occasional entries in his notebooks and publications refer to finds, as well as to purchases or trades. Later, in retirement in England, he enlarged his

8. All of this was very much in the manner of Brøndsted, that is that each of them had a wide interest in Greece both as it had been and as it was in their own day. But Leake had a particular aim.
9. Marsden 1864, 18.
10. One wonders whether Leake would have discussed the possibilities of research on Antiquity with the Foreign Secretary and others in the Foreign Office, or whether that was a private venture. Certainly his interest in classical topography and ancient habitation bore directly on his descriptions of the Greece of his own day.
11. Marsden 1864, 16.
12. Marsden 1864, 16.
13. Marsden 1864, 16.
14. Marsden 1864, 17.
15. Marsden 1864, 18; Regarding Leake's orders also refer to Curtius 1876, 242-243; Wagstaff 2001a, 191.
16. Also refer to Wagstaff 2001b.

collection enormously by purchases – largely coins[17] as well as gems, vases, bronzes. Artistic observations regarding issues of design, style, or decoration – concerns of a connoisseur[18] – are few and far between in Leake's work. Certainly, his aesthetic appreciation of Greek works was a factor in their acquisition,[19] but there is a more practical explanation of Leake's collection. As is clear from his publications, not least the catalogue of his coins, Leake's purpose in collecting was to investigate and illustrate the history of Greece, not to build up a cabinet for personal enjoyment.

Leake recognized too that context needed to be attached to the individual pieces of a collection – the linkage of things and context being a fundamental basis for building archaeological knowledge. In an 1839 letter to the Trustees of the British Museum Leake remarked: "It seldom happens that remains of art from Greece are not of some value, or that they are not of some utility in archaeological studies, when their origins are exactly known".[20] Of course 'exactly known' in the early to mid 19th century, i.e. referencing the village, town or city from which the remains derive, is far from providing enough context in the 21st. Still, we must begin somewhere, and the level of resolution at which Leake was referring was perfectly fine for the nature of the problems, which 'archaeologists' were facing at the time. One cannot build knowledge without a recognizable point of departure and in this regard Leake's emphasis on context cannot be exaggerated. For example, one of the most remarkable of the coins acquired by Leake is the gold medallion with the types of Athena, and Alexander hunting a lion. Of this he notes: "purchased by me at Serres, the ancient Sirrhae, now the chief city of the interior of Thracian Macedonia".[21] Such references to provenance provide important information regarding not just the production area but also the very authenticity of such pieces, in this case one of a rare series of gold medallions of Roman imperial times whose genuine antiquity has been doubted in the past. Moreover, the publication of his own coins is strewn with topographical comments in which the coins add information of significance.[22] Still, with Leake, we may push the association of collection and context further.

In 1839 Leake donated his collection of marbles to the British Museum.[23] In his *Memoir*, John Howard Marsden provides us with a list of the items donated:

1. "Bust of Æschines, inscribed with his name, from Bitolia in the ancient Pelagonia: presented to Colonel Leake by Ali Pacha.
2. Head, supposed of Homer. From the same place.
3. Basso relievo of a woman holding a torch, standing between a horse and a dog. From Crannon, in Thessaly.
4. Basso relievo representing a votive offering of hair to Neptune by Philombrotus and Aphthonetus, sons of Deinomachus. From Thebæ Phthioticæ.
5. Fragment of basso relievo representing a battle of the Amazons—perhaps the death or capture of Penthesileia. From Bryseæ in Laconia.

17. Bought in London at auction, and acquired from Greece with the help of George Finlay who was resident there.
18. On connoisseurship refer to Shanks 1996.
19. Leake was regarded as an authority on the sculptures of the Parthenon and took on various roles where his knowledge of Greek sculpture was in demand – as, for example, consultant to a special Committee set up to investigate the potential of colour in the decoration of the Elgin Marbles, Ferguson 2001, 31. Hugh Ferguson even claims Leake owned a set of sculptural casts of Parthenon marbles which was sold to the Royal Danish Museum, Copenhagen, Ferguson 2001, 31; this seems unlikely based on a number of correspondences discussing the possibility of their acquisition with George Finlay, Hussey 1995, 657-678, we owe this reference to Malcom Wagstaff. Also see the article by Jan Zahle in this publication. Zahle does not discuss Leake in connection with the casts in Denmark.
20. Quoted in Marsden 1864, 40.
21. Leake 1854, European Greece, 64.
22. Leake 1854; Marsden 1864, 40.
23. This donation may have been spurred by his move to a new residence at 50 Queen Anne Street, Cavendish Square, London after his marriage to Elizabeth Wray Wilkins in 1838, ODNB 2004, XXXII, 982f., 983. Though the gift may not have had to do with lack of domestic space, the 1841 census states that the Leakes had five female and two male servants in residence, Wagstaff personal communication.

6. Statue of Hercules, much mutilated. From the coast of Laconia.
7. Torso, from Luku, probably the ancient Thyrea, in the Peloponnesus.
8. Draped female, wanting head. From Sparta.
9. Hermaic statue of Ceres, dedicated by Chrionis.
10. Painted tile from Ægium in Achaia".[24]

It is of interest that of these marbles in his donation all but one (no. 9) carried a provenience. Items in his collection, when attached to a contextual reference, and more specifically, as in the case of these marbles, items acquired during his travels in Greece, acted as mnemonic references to specific events; they performed as guarantors of experience. Indeed, traceability from the fine edge of the publication – or in this case a letter to the Trustees of the British Museum – to the moment of the encounter was built into Leake's work – traceability is the hallmark of accuracy for archaeologists.[25] For example, the contextual referent of the city, as with Thebæ Phthioticæ in the case of marble number 4, connects us to the more detailed circumstances of the relief's removal by Leake in the course of his work in Greece. As the *Travels* are arranged in chapters further indexed by geographical locale, we may return to Phthiotic Thebes on the 15th of December, 1809 to witness the encounter: "A little below the citadel, where the ground is very rocky, some large irregular masses were fitted to the rock as a basis to the superstructure. A few foundations of buildings are seen within the ancient inclosure, and the ground is every where strewn with stones, broken pottery, and fragments of inscribed marbles … Among them was a monument lying on the ground so complete and at the same time so portable, that I was tempted to carry it away with me. It is a representation in relief of two platted locks of long hair, suspended to an entablature, which is supported by two pilasters. On the architrave an inscription shows that the monument commemorated the dedication of their hair to Neptune, by Philombrotus and Aphthonetus, sons of Deineomachus".[26]

Leake was a serious student, and his collection was linked into a complex of mobile, paper-based media – references, measurements, descriptions, travel narratives, etc. – which could facilitate their further study; all have a part to play.[27] It is interesting that despite numerous opportunities to acquire various sculptures and inscriptions, many described in the itineraries of his travels in Greece, he returned with only the ten marbles listed here. In the passage from *Travels in Northern Greece* quoted above Leake specifies two pragmatic factors, or rather, qualities of the *pragmata*, which weighed upon his decision to return with a marble – completeness and portability. While his practice, as a military geographer, was focused on returning with things – with, that is, reliably witnessed information – the vast majority of things, from contemporary ploughs, to the stone soffit above the door at the treasury of Minyas, to ancient inscriptions, were transcribed and their contents circulated beyond their location without recourse to their removal.[28] *Travels in Northern Greece* (1835) alone contains hundreds of illustrations of inscriptions – 223 inscriptions to be exact. These things too should be listed under the rubric of collecting.

Leake's collections remained with him until his death, save for the sculpture, which had earlier gone to the British Museum. By his will the other material was not to go to the British Museum, perhaps surprisingly, but to be offered to Cambridge University at a generous price. That offer was accepted, and in 1864 the Fitzwilliam Museum acquired its many riches. The collection of 120 ancient gems was then, and is even now, the most generous bequest toward what is today a large and important assemblage of gems. There were in bronze about 25 pieces, mostly figurines; more impressively some 74 Greek vases; and most impressively the gigantic collection of more than 9,100 Greek

24. Marsden 1864, 40.
25. Witmore 2004; Witmore 2005.
26. Leake 1835, IV, 361.
27. Latour 1999.
28. Leake 1835, II, 149 and Leake 1835, III, 548f.

coins. While the private collection was perhaps a necessary attribute of a gentleman scholar in London, Leake's collection foreground and affirmed his experience in Greece; it proclaimed 'I was there' – an authoritative declaration which Leake, 'taciturn' though he may have been, never failed to make, e.g. Leake's discussion of his coins.[29] Moreover, the collection is tethered to, and can be traced to (both back and forth), an 'original situation' which it simultaneously both reinforces and is reinforced by. It also provided an ensemble close at hand for questions of classification and systemization.[30] In these processes of codification and standardization, the circulation of these things and their relations with contexts, media and other people is quite complex.

Thessaly 1810

The 5th of January. Having sent his baggage on from the village of Sofádhes to Kardhítza where he will lodge with the son of the recently deceased Suleymán Bey, Leake proceeds along the left bank of the river Sofádhes. The bank is high. The river has a sandy bottom; its depth is around 2 feet – all of which is necessary information should future planning prove that it need to be forded! Leake says nothing of the rain, seldom torrential, "generally in a mist," which, only two days earlier he described as rarely short of constant while traveling.[31] After about 1 1/3 miles he enters Maskolúri. Renowned for its May fair, the village is comprised of some 40 to 50 houses. Here the river is crossed via a stone bridge supported by two arches. Mataránga, a village divided into 4 or 5 smaller hamlets, lies 2 2/3 miles farther along the road from Sofádhes. Having arrived at the southernmost hamlet, Leake halts for 2 or 3 hours. During this period Leake states: "upwards of 100 ancient coins are brought to me for purchase, together with a few other relics of antiquity, which have been found in the corn or cotton fields adjacent to the height which I have before mentioned as so conspicuous an object throughout the surrounding plains".[32]

Upon the summit of this hill Leake states that there is a round Hellenistic fortification, some 100 yards in diameter. Remains of a few towers are present. From the center where there are "some ruins of a keep or tower" a beautiful view unfolds "of the extensive plains surrounded by the *Pindus* and its branches of *Agrafa*, and *Khassiá*, with *Olympus*, *Ossa*, *Pelium*, and *Othrys*, along the eastern horizon".[33]

Leake wrote the majority of his itineraries on the ground as daily narratives in his notebooks throughout the course of his journeys. These were then compiled and further augmented with other details either at subsequent points in his travels or back in London – emendations were hand written in the spaces between lines of text. Eventually these notebooks were published in the form of a travelogue. At the turn of the 19th century the genre of the travelogue was a mixed one. While the day-by-day account of possible adventure, hardship and intrigue in potentially dangerous lands had a wide appeal for a more general audience, the travelogue was also suited to laying out both criteria associated with what was deemed worthy of observation and evidence for argumentation.[34]

The conditions under which such worthy observations could take place were difficult. In 1810 parts of Greece were less than hospitable to the unprepared traveler; marauding bands of thieves, brigands, robbers, pirates were a constant nuisance to intrepid foreigners and obstinate locals alike.[35] This was the more complicated because in Epirus the brigands were being

29. Leake 1827, 153. It is significant that the collection obtained by Cambridge University included his original notebooks and survey books, now held in the Classical Faculty Library of the University.
30. For a superb history of the antiquarian collection refer to Schnapp 1997.
31. Leake 1835, IV, 491.
32. Leake 1835, IV, 497.
33. Leake 1835, IV, 497.
34. Driver 2001; Also Pratt 1992.
35. Leake refers to many instances of aggression by robbers in step with Ali Pasha's incapacity to fully suppress them, especially in the more mountainous regions e.g. Leake 1835, IV, 353-355. For locals, the oppression extended to lawless Albanian and Turkish soldiers and extortionate officials e.g. Leake 1835, IV, 374.

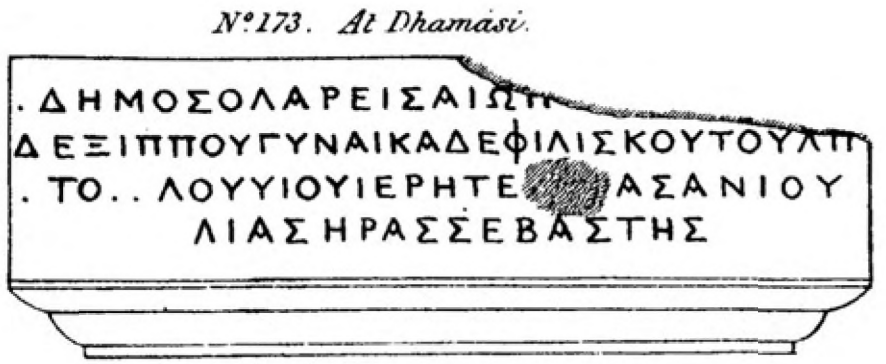

Fig. 2: Inscription No. 173 after Plate XXXVI in Travels in Northern Greece IV (1835).

used by France to stir up trouble for Ali Pasha who refused to declare himself on their side.

Leake's ability to travel to areas dangerous to other travelers rested upon his political, turned personal, connections – which rested upon the backing of the British Government. Without the support of Ali Pasha in particular he would not have been able to do very much. He comments on the situation while visiting a village located east of Volos: "Velestíno was long noted for the savage disposition of its Turkish inhabitants, and for its lawless government, and it would have been impossible for a traveller to make such a journey in Thessaly as I have done. Affairs are now altered. The Turks still retain their barbarous manners, and their hatred of Christians, but they are kept within bounds by the fear of Aly Pasha whose authority is unquestioned here …".[36]

But protection cannot be facilitated simply by "a dirty buyurtí" (a written order) from Ali alone.[37] Leake had an entourage supplied by the court – at times a very large entourage consisting of upwards of twenty men[38] – which accompanied him throughout Thessaly.[39] Of all the travellers, architects, antiquarians, or adventurers to visit Greece, Leake is the first to travel to so many locations in the interior and bring back reliable knowledge about these regions. His capacity to do so rested on his ability to mobilize a great number of allies to his cause.[40] It is also true that travelers would not have been able to get around save for the Ottoman infrastructure of official post stations with their relays of horses. Leake's abilities of this nature were as significant for his pursuit of ancient topography as they were for his military investigations.

In late 1809 Leake's duties as special envoy to the court of Ali Pasha had taken him to Ioánnina where he spent ten mid-November days in the court. On the 20th of the same month, while en route to Tríkkala, he met with several prominent locals including Dehli-Iánni, the Captain of the armatolí who defended the Metsovo pass between Epirus and Thessaly against brigands. On the 1st of December, Leake visited Abdím Bey, the civil governor of Lárissa for the third time since 1805. Three days later, he stops by the house of the agent (the Subashí) of Vely Pasha in Dhamási. Here, Leake draws a statue base with an inscription, No. 173, and notes a second marble with a man with a circular shield in low relief (fig. 2). Given his primary responsibilities for political liaison Leake often had to be pragmatic and opportunistic in his antiquarian work, taking advantage of circumstances as they presented themselves.

36. Leake 1835, IV, 43f.
37. This order is inferred to be in Leake's possession on the basis of his statement: "a dirty buyurtí from Ioánnina half the size of one's hand is of more effect than a firmáhn of the Porte three feet in length", Leake 1835, IV, 438.
38. E.g. Leake 1835, IV, 261.
39. On the 1st of January, Leake even refers to his tatár Mustafá, who seems to have been with him since leaving Ioánnina in November, Leake 1835, IV, 489.
40. Cf. Latour 1986.

Returning to the 5th of January 1810, Leake continued to survey the surrounding areas for extant remains above ground. His identification of these remains is mediated by a variety of observations (archaeological, the presence of substantial features including the Hellenistic walls and tower remains mentioned above; topographical, the centrality of the site in the plains of Upper Thessaly; horticultural (the fertility of the soil); and things (inscriptions, ancient texts – Livy, Caesar, Strabo, even Stephanus – and coins). Leake's argumentation is worth pursuing further. Both Κιεριες and Μητροπολιται are mentioned in an arbitration inscription which Leake copied from the wall of a church in the nearby town of Mataránga.[41] Both Livy and Caesar mention Metropolis on several occasions as standing in this part of Thessaly. On the other hand, Leake continues: "though the name of the Cierienses does not occur in history, I have already had occasion to form a presumption as to the importance of this people, from having met with some varied specimens of their coinage in Thessaly or Epirus, bearing the legend Κιεριειων. Of these coins I find no less than four among those brought to me for sale by the peasants of Mataránga, a fact which, coupled with the evidence of the inscription relative to the boundaries between the Cierienses and the Metropolitae, seems to leave no doubt as to their origin. We may conclude therefore that the hill of Mataránga is the site of a city called Cieria, or Cierium".[42]

Still, Leake does not stop here. He continues to enlist other inscriptions, No 218 from the same church as No. 217 bears the epithet Neptune Cuerius; he continues to enroll other coins, three of which record the worship of Neptune at Cierium (fig. 3); he continues to discuss topographical considerations on the basis of various texts. Leake settles the question of identification by discovering the remains of Metropolis "at a distance of ten or twelve miles to the westward of Mataránga, and exactly in the position which Strabo indicated".[43] Ultimately, in augmenting an earlier thesis that accounted for the absence of Cierium in ancient literature published in the *Transactions of the Royal Society of Literature* (he identified it with Arne (1827)) Leake concedes that Cierium (known today as Kierion) was probably the Pierum mentioned by Livy and that Arne was an earlier name.[44]

Fig. 3: Coin No. 3 from Leake's essay "On some Coins of the City of Kierion in Thessaly" (1827).

In linking remains on the ground with their ancient appellation Leake enlists a variety of allies – his local entourage, local informants, coins, inscriptions (successfully transcribed from the walls of a church to the pages of a notebook), ancient authors, geography, horticulture, the ancient features themselves and so on. But not all of this argument is based upon evidence, which unfolded on the 5th of January. These narratives are multitemporal; they are both distributed and dislocated. To understand this we must move from Thessaly to the Thames.

41. No. 217 in Leake's catalogue, Leake 1835, IV, Plate XLII.
42. Leake 1835, IV, 498-499.
43. Leake 1827, 155.
44. This suggestion was offered by Müller in relation to Leake's paper in the *Transactions of the Royal Society of Literature*, refer to Leake 1835, IV, 503-504, note 2; Also Marsden 1864, 22-23.

London 1830

In 1830, London was an imperial city, the largest of any on earth. In 1830, London was a world metropolis of the arts, humanities and sciences.[45] On either side of 1830, London, historically speaking, was in the midst of an 'industrial revolution,' and behind this situation were considerable transformations in science, in record-keeping, in time-keeping – trends toward the regularization, standardization, synchronization of practices and information; trends which are the basis of the eventual triumph of the universal.[46] By 1830, London, a 'New Athens' metaphorically speaking, had witnessed an explosion of wealth, creativity and innovation.[47] The anatomy of the city and its institutions were acquiring the unique shape that is recognizable today. A major period of dock construction, which included the London, West India and East India Docks, had recently ended with the opening of St. Katharine in 1828. Infrastructural changes in the decades preceding 1830 extended to bridges (Southwark, Waterloo, Vauxhall and the newly rebuilt London Bridge), canals (Regent's, Grosvenor and Kensington), roads, warehouses, and, in Jeremy Bentham's London, factories, hospitals and penitentiaries.[48] The British Museum flush with antiquities – the Rosetta stone, the 'Elgin Marbles,' the 'Phigaleian Marbles' – and recently acquired collections – the Hamilton collection, the Townley collection – arose in Greek Revival Style, Robert Smirke's design, from 1823. University College London followed. This intense noise was more than simply a backdrop to Leake's work; it was a crucible; it even had a major role to play.[49]

Leake, now a retired lieutenant-colonel and by this time a respected Classical scholar and topographer, had written, among other works, *Topography of Athens* (1821) and his treatise on the Greek Revolution, *An historical outline of the Greek Revolution* (1826). 1830 would witness the publication of *Travels in the Morea* in three volumes, a work celebrated as a "display of vast erudition … and above all a degree of precision in … geographical computations".[50] It would be another five years before the appearance of his *Travels in Northern Greece* (1835). Leake's work provided an exemplar for subsequent scholarship and this eventually won him the epithet: 'model geographer'.[51] Leake's work was also exemplary of how reliable information about lands situated at a great distance could be gathered together in London and thus provide a basis for further work to be done. The global nature of this information accumulation is critical to understanding London as a world centre in 1830.

A cursory glance at the *Monthly Review* for 1830 gives one some indication of the wealth of works catering to a demand for global knowledge. Beyond Leake's Travels in the Morea there were, for example, Travels in the interior of Mexico, in various parts of Peru, in Kamtchatka and Siberia, in the Chaldea, through the Crimea, through Central Africa to Timbuctoo; there were Voyages to the Arctic Regions; Picture of Egypt, of India; Narrative of a tour through some parts of the Turkish Empire, of residence in China, of discovery and adventure in Africa, of a journey overland by the continent of Europe, Egypt and the Red Sea, to India. Like Leake, the majority of these authors were military men or diplomats, who had a particular audience of like-minded enthusiasts for their works.

The years following Waterloo witnessed a proliferation of scholarly, intellectual and scientific societies and dinner clubs. Leake had been a member of the Society of the Dilettanti from 1814 (by 1859, shortly before his death, he would become second on the list after Lord Aberdeen) and the African Association from 1815.[52] Described as a gentleman of the Royal Artillery and "well versed in several branches of Science,

45. Refer to Jenkins 1992b; Morus 1992.
46. Bowker 2005.
47. For comparisons to Athens after the defeat of Persians – in London's case, the French – refer to Jenkins 1992b.
48. Saint 1992; Weale 1851.
49. The decades around 1830 were momentous for antiquarian London – Charles Robert Cockerell, Sir Richard Colt Hoare, Thomas Leverton Donaldson, Sir William Gell, William Richard Hamilton, William Martin Leake, Sir Walter Scott, William Wilkins – to name but a few. This added to the noise.
50. Monthly Review 1830a.
51. De Grey and Ripon 1860; Also Marsden 1864, 43.
52. Marsden 1854, 41.

and who has explored the countries of Egypt, Greece, and several other parts of the Levant &c." Leake was elected a member of the Royal Society in 1815. The list of proposers included James Rennell, formerly surveyor general to the Honourable East India Company; Sir John Barrow, second secretary to the Admiralty between 1804-1845 who would lend his name to several large portions of Alaska; Richard William Hamilton, antiquarian and diplomat; Viscount Valentia (Lord George Annesley), the Second Earl of Mountnorris; and Sir Francis Beaufort, deviser of the Beaufort Scale.[53] Leake was a founder member of the Raleigh Club (1826), the Travelers' Club (1819) and the Athenaeum (1824).[54] Beyond also being a founder member of both the Royal Society of Literature (1821) and the Royal Geographical Society (1830), Leake would eventually become a vice-president of both. After 1830, he would add the Numismatic Society to this list (1836).[55] These cosmopolitan dinner clubs and societies situated Leake within a variegated and fluctuating, yet always exclusive, community of scientific enthusiasts, antiquarians, inventors, Classical scholars, politicians; and many of these contacts, like the Colonel, were former or current military men.

Membership in these clubs not only required sufficient wealth (membership fees were not inexpensive) and leisure; for some, political or aristocratic status (the patrons) was obligatory, for others, significant accomplishments were requisite. Consider for instance that in addition to the admission fee (30 guineas) and annual subscription (10 guineas) membership in the Travellers' Club excluded anyone "who has not traveled out of the British Islands to a distance of at least 500 miles from London in a direct line".[56] Leake, as a member of its first committee, would regularly meet with the Earl of Aberdeen, Lord Auckland, Viscount Palmerston, and antiquarians such as W.R. Hamilton, C.R. Cockerell, and Robert Hay – both Hamilton, who had traveled with Leake throughout Egypt, Syria and Greece from 1801-1802, and Cockerell, who first met Leake in Greece in 1810, were life-long friends of the Colonel.[57] Many of these men – they were always men – were members of the other societies and clubs to which Leake belonged. Moreover, such influential associations lent themselves well to the affirmation of authority and credibility, necessary attributes of a respectable gentleman scholar.

These dining clubs, these gentlemen's clubs, often met monthly, fortnightly or even weekly.[58] In 1830, when in London, Leake lived at 26 Nottingham Place, Marylebone, near Regent's Park, which was still undergoing renovation by John Nash, yet another associate of Leake.[59] Nottingham Place is easily within a two-mile radius of the political, judicial and administrative heart of the British Empire – where the majority of these clubs and societies met: No 49 Pall Mall; Somerset House on the Strand; 4 St Martin's Place, Trafalgar Square; No. 3 Waterloo Place.

Some clubs gathered periodically in private taverns or hotel rooms, e.g. the Dilettanti who never had a clubhouse but met in the Thatched House in St. James's Street. However, an important part of rendering the social relations that these clubs facilitated even more durable, not to mention more exclusive, centralized and visible, was to construct a clubhouse. Decoration, design, furnishings, all catered to the lavish sen-

53. The Royal Society, 1815: Certificate of Election and Candidature for William Martin Leake, The Royal Society, GB 117, EC/1815/02. Rennel, described by Felix Driver as "*the leading British geographer of the late eighteenth and early nineteenth centuries,*" Barrow, Hamilton, and Beaufort were all major players in the Royal Geographical Society, Driver 2001, 24-48.
54. Marsden 1864; ODNB 2004, XXXII, 982f.
55. De Grey and Ripon 1860, cxvi; ODNB 2004, XXXII, 983.
56. Wheatley 1891 III, 406.
57. Ferguson 2001, 18-23; Marsden 1864, 10-11.
58. In May of 1830 the Royal Society met on the 6th, 13th, 20th and 27th of the month and the Royal Society of Literature on the 5th and 19th, Monthly Review 1830b, 155).
59. Both men are listed as council members of the Royal Society of Literature, the list is inscribed in Volume 1(1) of the *Transactions* 1827).

sibilities of some members. Still, the societies and clubs which Leake belonged to were more than meeting places for gentlemen of leisure, letters, military rank, art, science, travel or whatever; they were also locales for the accumulation of books in libraries, charts in map rooms and therefore were exchanges for research in the subject area of their mandate. In 1830 London, access to such scholarly resources was far from a public privilege.[60] When the new clubhouse of the Athenaeum opened for its members at the corner of Pall Mall and Waterloo Place in May of 1830, one of the foremost wishes of the founders was that it should possess a good library.[61] Leake was on the library committee, as he was at the Travelers'.[62] There were nearly 4,000 books to begin with.[63] By 1832 there were 10,000 – partly donated by fellow members such as John Murray, Leake's publisher for *Travels in the Morea*.[64] The ability to assemble a wealth of works in one place – Greco-Roman and British antiquities being an important subject area for the Club – has a great deal to do with the advancement of knowledge.

Nowhere was all such cultural activity more evident than in the Royal Geographical Society. 1830 was momentous yet again for the founding of the Royal Geographical Society by members of the Raleigh Club (which it absorbed along with the African Association in 1831). "Part social club, part learned society, part imperial information exchange, and part platform for the promotion of sensational feats of exploration"[65], the Royal Geographical Society was founded on a mandate, which specified the promotion and distribution of Geographical knowledge. Under this mandate the Society had six specific objectives: "first, to 'collect, register and digest, and to print … such new, interesting and useful facts and discoveries as the Society may have in its possession'; second, to 'accumulate gradually a library of the best books on geography … [and] a complete collection of Maps and Charts'; third, to 'procure specimens of such instruments as experience has shown to be most useful'; fourth, 'to prepare brief instructions for such as are setting out on their travels'; fifth, to 'correspond with similar societies that may be established in different parts of the world'; and sixth, to 'open a communication with all those philosophical and literary societies with which Geography is connected".[66]

The emphasis of the Royal Geographical Society was to bring things back to London, to accumulate geographical information. In this regard, a map room and library were critical. Furthermore, a collection and knowledge of the most precise instruments is necessary to further acquiring such knowledge.[67]

With the Royal Geographical Society (as with the network of other institutions and societies) information is handy, immediate and understandable. Several thousand square miles, translated into several hundred square inches and accompanied with detailed information of every sort, can be pulled from a shelf and passed across a table. Observations in the form of narrative, maps, tables, diagrams, or numerical calcula-

60. Twenty-one years later the publisher John Weale, in his London Exhibited in 1851, deplored the dearth of public libraries in London (after all he was a publisher!): "With respect to public libraries the British metropolis is yet far behind the chief continental towns. While Paris possesses seven public libraries, accessible in every way to persons of all classes; while Dresden has four, and Florence six; while Copenhagen and Vienna have each three; and Brussels, Berlin, Milan, and Munich each two; our own gigantic metropolis possesses only one important library (The British Museum) and that—to the disgrace of the nation—not freely open to the public", Weale 1851, 594.
61. The Athenaeum was 'of the city of Athens' in more than just name as under the cornice runs the 'extravagant novelty' of the Parthenon frieze by the sculptor John Henning, the description from Weale 1851, 294. This bit of Elgin-inspired decoration set the Club back just over £2165, Cowell 1975, 17. And centered above the composite (Roman-Doric) portico with spear in hand was a statue of Athena herself. Historians tend to speak of 1830 as the 'height' of the Greek Revival Style.
62. The Travellers' Club, whose new clubhouse was opened in 1832 on Pall Mall, also had an important library that was largely dedicated to travel, refer to FitzRoy 1927.
63. Cowell 1975, 20.
64. Cowell 1975, 65-90.
65. Driver 2001, 25.
66. Driver 2001, 28.
67. Given their talents the makers of the theodolites, the sextants, the compasses, or the watches being mobilized were often elected as members of these societies.

tions can all be juxtaposed with other information from the same region acquired by different military personnel or scholars and thus become the topic of conversation or the subject of a debate. The ability to assemble many different consistent and standardized modes in one place leads to controversy, disputes over accuracy and precision, when elements don't match up. Of course there also has to be agreement over the standards deployed and this too was a topic of contention. Instructions must be given for what to observe and how to deal with it.[68] This facilitates compatibility, though the degree to which this actually occurred can be overstated.

Felix Driver, in working with Bruno Latour's notion of *centre of calculation*, which refers to any site where maps, plans, diagrams, numerical information – 'immutable mobiles' – are managed, summed up and combined in order to make "some type of calculation possible"[69], has argued that the Royal Geographical Society was an information exchange of a more heterogeneous kind given its emphasis on exploration at large.[70] In other words, for Driver, information compatibility was not always facilitated by the diversity of forms of geographical knowledge collected by the sundry groups comprising the Royal Geographical Society, even though the Royal Geographical Society aspired to this in their mandate. To be sure, all this information collected in one place allows members to *see* the world anew, but scholars like Leake needed to rely on a more dispersed and variegated network, which did not end at the boundaries of any one society. In 1830, the centers of calculation were distributed much more broadly.[71]

London was a multifaceted knowledge base for revisiting Greece and building further knowledge of the ancient world. But this is an extremely small drop in a rather large bucket. In 1830, an infrastructure was in place to support the circulation of goods, scholars, soldiers and information from every corner of the globe. In those days, all the rest of the world, a paper world, a mobile world of coins, antiquities, art, material culture, new species of flora and fauna, was being gathered together in London. From here, especially if you knew the right people and had some means, knowledge could now be continually refined, reshuffled, and redistributed. London was a hub in the circulation of global information. London was a centre of calculation in the Latourian sense. Still, London was one centre among many – Paris, Berlin or even Copenhagen – all vying for supremacy.[72]

1830 was the midpoint of the French *Expédition Scientifique de Morée*. Even more accurate geographical information, linked in from another centre in Paris, was being complied by a scientific contingent under the auspices of the Dépôt de la Guerre, a mission modeled upon the collaborative body behind the *Description de l'Egypt*. Leake does not travel back and forth to Greece but he is none-the-less able to improve upon his original work because of the French accomplishments. Leake's reaction to the publication of the French mission would lead to his *Peloponnesiaca*.[73] New observations or disputes over the accuracy of the French descriptive geography would lend fuel to Leake's narrative, but more importantly the powers of a standardized, compatible and optically consistent map, an achievement based upon over two years and thousands of man-hours of wayfinding, navigation, point marking, triangulation, squaring and measurement by the French military geographers, topographers, staff officers and troops along with the most precise instruments available at the time, would be the most celebrated aspect of the French labors.[74]

68. Regarding such instructional literature refer to Driver 2001, 49-67; Also Witmore 2004, 140.
69. Latour 1986, 31-33; Latour 1987, 215-257; Latour 1999, 304.
70. Driver 2001, 27-37.
71. Latour 1987.
72. Latour 1987.
73. Puillon de Boblaye 1836.
74. Curtius 1851-1852, I, 133-136; Leake 1846, vi; Loring 1895, 25.

Boeotia to Euboea 1805

The 21st of December, 10:27am, Leake passes the eastern periphery of Thebes en route to Egripo (now Khalkis), a town located on the island of Euboea. Pocket watch in hand, Leake and party continue: 10:33, on the right, the fountain of St. Theodore; 10:50, "the road to Bratzi, a branch of which leads to Sykámino" to the southeast; 11:15, σταις πορταις ('the gates'), an 'ancient foundation' which crosscuts the road; 11:21, a small but conspicuous hill – potentially the Teumessus referred to by Pausanias – lies "three to four hundred yards on the left".[75] The road begins to ascend toward a junction between the 'supposed Teumessus' and Mount Soró at 11:30. Exactly 11 minutes later, the descent; 3 minutes later the road joins again the plain: "At 11:50 Serghis is a mile and a half on the left, on the slope of the mountain; at 11:58 we are just below the centre of its summit and near its lowest falls. At 12:10 Spakhídhes is half a mile on the right. At 12:35, two or three miles on the right, a ruined tower of modern construction appears on the top of a rocky height, which hides from view the village of Andrítza, where are some Hellenic remains, and a copious source of water. The ridge connecting Parnes with Cithæron appears between the height of Andrítza and that of Soró".[76] For the next hour and 55 minutes Leake continues to note the precise time at which his party passes any points along the route worthy of note including topographical features, ancient remains, picturesque views, and even contemporary agricultural fields. Leake also specifies the exact amount of time during which they stop. At 3:30, having passed along the shore beneath the heights of Karababá – which Leake supposes to be the *Canethus* mentioned by Strabo – and over the *Euripus* by way of a stone bridge of 60 to 70 feet in length, then a wooden one of 35, Leake enters the fortress of Egripo. Here the Artillery Captain is received at the house of the Russian consul.

This to-the-minute precision would prove to be useful for subsequent travelers moving between points overland. Travel times were often collated into lists much like the navigational time logs of the period, as with Sir William Gell's roadbook, *Itinerary of the Morea* (1817). Of course, for Leake there was always the primary importance of military utility.[77] The steady movement of cogs and gears translates into a temporal measure – clockwork – and the repetitive act of temporally referencing one's location in space regulates one's activities on the ground. So that the measurement of time, if accurate and credible, becomes the measurement of physical space. And a system of measurement of any kind is a key element in standardization.

But Leake's activities are more complex than this. He was not alone in his mission: a fluctuating host of informants, guides and attendants, often unacknowledged, contribute local knowledge (not to mention, his faithful valet who at this point had been with him since January); a variety of instruments lend their action – sextant or theodolite and compass[78], pocket watch,[79] and even a telescope[80]; a number of portable versions or extracts from texts by both ancient authors (perhaps a 1516 Adline Press edition of Pausanias' *Periegesis*[81]) and recent travelers[82]; even companion species share their labor – horses, mules and, at times, donkeys. All these come together in the achievements for which 'Leake' receives credit. Still, if we are to understand the act of marking points worthy of note by the position of metal hands on a watch face we need to return to Euboea in 1805.

The 23rd of December does not appear in Leake's *Travels in Northern Greece*. The published travelogue

75. Leake 1835, II, 244-245.
76. Leake 1835, II, 246-247.
77. Foucault 1995.
78. Leake 1835, I, vii and Leake 1830, II, 335 respectively.
79. Wagstaff believes it to be unlikely that Leake carried a chronometer.
80. Leake 1835, IV, 454.
81. Wagstaff 2001, 192-193.
82. Leake 1835, I, vi.

continues with the 24th when Leake recrosses the *Euripus* at 9am. Still, two pages of a little survey notebook (of flip top design with brass clasp which could easily fit in a pocket) contain references which reveal something of the day's activities. Divided vertically across two pages, the left side bears a list of degrees taken from the hill of Calogheritza (spelled Kalogheritza) marked as lying 1 1/3 miles from the bridge of Euripo, the right is a sketch map of the Boeotian and Euboean coast line with five lines, indicating bearings in radial degrees, from Calogheritza to prominent geographical points. The list begins: "extreme pt. of Càlamo S43E; pt. (taken from Thebes) above, cal. S39 1/2e; Pentelicus keeping above the ridge of Parnes S14 3/4E; ~~Oziá S42 1/2E~~ [struck out]; Mt Messapnius, Χλυπας N96W; dis. of Larmes N57W; Euripo Bridge in line with Karabálas N51 1/3W; pt. of Opuntius Bay N37 1/2W; pt. of Aldepsus N33 1/2W." This list continues in this way for another 13 points with an additional 5 measurements of degree marked along the radii drawn upon the sketch map. This radial coding, probably facilitated with a compass and the aid of "a sextant of 4 inches radius made by Berge," is a key step toward transporting a point of view, a line of sight, and therefore, the landscape features lined up, back to London.[83] On the ground instruments and media mediated Leake's *vision* of landscape, they too had a stake in what was observed. All these actions are necessary in translating the Greek countryside into a form that circulates.

Returning to the issue of chronometrics we began with, Leake established his own metrology on the basis of how many paces a horse took per minute and the length of the paces; this was established for various types of mount.[84] This metrology allows Leake to calculate distance in laying out the triangles necessary for compiling a map (fig. 4). Leake's clockwork was the basis of calculating distance and this distance, when combined with the measurement of degrees, provided a basis for triangulation, triangulation being a necessary step in the translation of the Greek countryside onto a two-dimensional surface while maintaining something of its reality as seen through linear perspective. Here, time measurement frames a way of looking; it frames a *mode of engagement*.[85] *Chronometry* translates into *chorometry*. Back in London, Leake further reconciled these measurements with "some important angles measured" by John Hawkins and the "Admiralty surveys, executed under the direction of Captains Smyth and Copeland, of the Royal Navy".[86] Indeed, throughout his travels Leake publishes, at various points within the text, a number of measured, optically consistent two-dimensional plans of structures and maps such as the one reproduced in Figure 4.

Geographical instruments, and the calculations necessary to produce accurate maps, require consistent and repeatable mode of engagements. Such repeatable practices are necessary for honest and reliable witnessing. A template to standardization must be established for how one deals with a stone inscription, a site, a landscape, a region. Once in place, or rather displaced while maintaining something of that reality in two-di-

83. Leake refers to taking bearings by compass at several points throughout the *Travels*. For example, on the 3rd of December, 1809 Leake states: "The Magúla of Tatári, which I suppose to be the site of 'Gyrton', is nearly in a line with the peak of Kíssavo or 'Ossa', which bears east by the compass: a few degrees to the left of the magúla [a height, often a mound, with ancient remains] some remains of the wall of 'Mopsium' are clearly distinguishable", Leake 1835, IV, 298. The sextant made by Berge is mentioned in correspondence with John Hawkins referenced as Tripolitsa 9th of March 1805, Leake 1805. Matthew Berge, the former foreman for the renowned London-based instrument maker Jesse Ramsden, inherited the business after Ramsden's death and continued to make instruments till his own death in 1819, refer to Stimson 1985. Leake 1805; Letter to John Hawkins, West Sussex Record Office, Hawkins Ms. 2(2) f. 304.

84. The 4th of January 1810. While traveling in Thessaly, Leake states that "with menzíl geldings [post horses] over the plain, our pace to-day is about six miles an hour", Leake 1835, IV, 496.

85. Witmore 2006, 276-278.

86. Leake 1835, I, vii. Hawkins travelled through Greece in the 1780's and 90's. In a letter to a friend Davies Gilbert, Hawkins boasted: "there is scarcely any part of Greece which I have not examined … I have accomplished a regular Trigonometrical Survey of almost all of Greece having drawn a chain of triangles from Salonica and Mount Athos to Cape Matapan", ODNB 2004, XXV, 930.

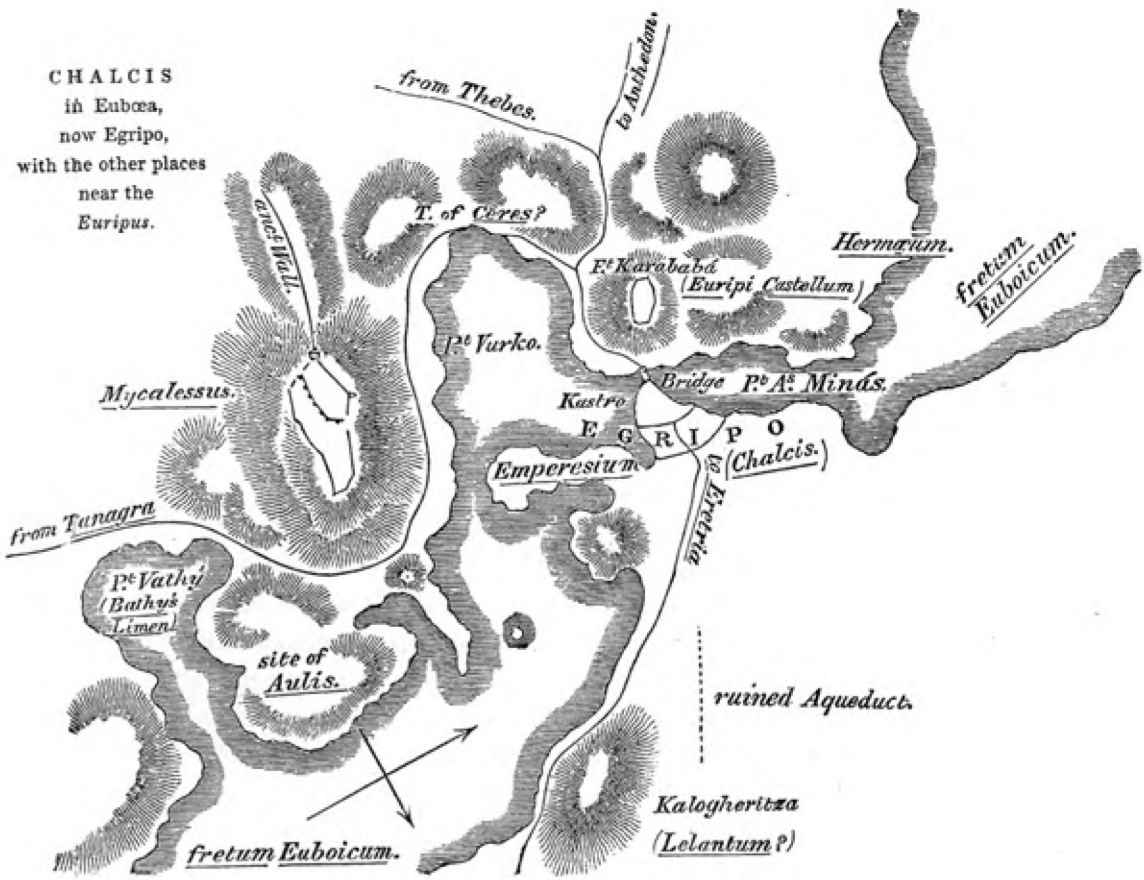

Fig. 4: Map of Khalkis with the coastline and the area around the Euripus—labeled as "CHALCIS in Euboea now Egripo, with the other places near the Euripus"—from Travels in Northern Greece (1835, II, 264). This map was compiled from Leake's measurements taken on December 23, 1805.

mensions, that information can be reshuffled, further modified and refined.[87] In this way, the value of exact maps rests exactly in their ability to translate the local into global terms. These practices, the observations they effected and the ways in which they were combined with textual narratives, went a long way toward setting Leake apart from his contemporaries. Together they form a basis for how Classical topographers and archaeologists approach the Greek landscape.

Numismatics

Leake early on recognized the usefulness of numismatic evidence in his investigations. As he traveled he accumulated Greek coins, "beyond all comparison the most numerous of Greek monuments".[88] When settled back in London he continued to acquire coins, so that at the time of his death in 1860 the collection totaled more than 9,100 pieces. Howard Marsden deemed it "among the first private collections of Greek coins in Europe".[89]

87. Latour 1986; Witmore 2004; Witmore 2005.
88. Leake 1854, vii.
89. Marsden 1860, 39.

One of Leake's most significant accomplishments lay in the organization and classification of the collection. It was in the compilation of a catalogue of these coins that his knowledge of ancient geography joined with numismatics to create yet another template to standardization. Not only did Leake think through this mass of numismatic material; he also published it in a work which included a clear description of every single coin, his great *Numismata Hellenica* (1854). No such numismatic publication of a private collection had ever been attempted before. Even the great and widely known works of Mionnet and Eckhel, which Leake knew and used, had been based on the French and Austrian national collections respectively.[90]

To the modern numismatist Leake's layout in his catalogue seems simply conventional. What one has to realize is that Leake established the convention. Organized by region (Asiatic Greece, European Greece, etc.) and by city within region (AMPHIPOLIS Thraciæ sive Macedoniæ, SICYON Achaiæ, etc.), it sets out each coin individually, carefully described as to obverse and reverse types. This information is printed toward the right-hand margin of the page to allow for the insertion of three columns in which are indicated the metal (specified by the Latin abbreviations AV, AR and Æ for gold, silver and *aes* or bronze), the flan size (based upon a scale derived from Mionnet), and the weight of each piece in grains Troy. This layout of measures and description was devised by Leake and is in use to this day, although size and weight are now indicated in the metric system. So, for example, one of Leake's coins from Cierium (marked No. 3 in Figure 3) is registered as:

Metal	Size	Weight
Æ	4	

"Head of Neptune ? to r. R. KIEPI. Horse running to r.; under it, a small figure of Arne".[91]

It is evidence of Leake's influence that this usage of columnar layout of information was adopted for the catalogues of Greek coins in the British Museum.[92] On the negative side, perhaps, is the curiosity that weights are provided only for the coins in precious metal; those in copper or bronze went unweighed.[93] The reason for this may well have been that the weights of small change were thought to have been little controlled at the mints, and that anyhow pieces of small change would have worn variously in circulation. Thus a discussion of ancient coin weights, which Leake provided as an appendix to his catalogue, concerns only gold and silver.[94] In the British Museum catalogue series it was only after thirty years that the weights of the bronze coins were finally indicated, in vol. 24 (1904). There is this much to be said for Leake, that while he did not himself provide the bronze weights his layout made clear where there was work to be done.

Not all of the coins included in the catalogue were actually of Leake's own collection, which included a great many electrotype copies. Usually a collector might in desperation acquire an electrotype of a famous coin if the original were unavailable, and hope soon to be rid of it. But Leake deliberately built a collection of electrotypes (through the hard work of his wife), many not of coins of striking visual effect but small bronzes necessary to his studies.[95] For the Colonel, the *Numismata Hellenica*, "a design so extensive in its aim, could never have been attempted with-

90. Mionnet 1806-1813; Eckhel 1826-1828. Leake's catalogue resembles Mionnet's in its attention to the detail of the individual coin, including fabric; Eckhel's in the accompanying commentaries (though to a more limited extent).
91. Leake 1854, European Greece, 35.
92. The first was R.S. Poole's *Catalogue of Greek Coins in the British Museum. Italy* (1873), initiating a series of 29 volumes, by various authors, extending to *Cyrenaica* (1927).
93. "On a reconnu, depuis long-temps, combine il était important de donner dans les ouvrages de numismatique le poids des médailles antiques d'or et d'argent [i.e., not bronze].", Mionnet 1839.
94. Which led Leake to disagree with Brøndsted, explaining the largest Athenian silver coin to be the decadrachm (correctly) rather than the octodrachm, Leake 1854, European Greece, 21.
95. In the dedication of the *Numismata Hellenica*, Leake 1854, Leake expresses his gratitude to his wife for her skill in this "most delicate of processes".

out the aid of Electrotype, which enables the collector, when aided by the liberality of the guardians of royal or national museums, or by the kindness of private individuals, to obtain perfect copies of the rarest specimens, and to render them as useful to art and literature as the originals themselves".[96] With the electrotypes the coins reached beyond the collections in which they were housed – the Bibliothèque Nationale, the British Museum, the Hunter Collection, the Pembroke Collection. Electrotypes added between five and six hundred coins to Leake's catalogue.[97]

But that leads us to the real purpose of *Numismata Hellenica*. Leake's view of the importance of coins to the student is clear from its opening sentence, which does not mention coins at all. He is committed to "geographical knowledge", "ancient history", "sources of historical truth". He never pretended to be a connoisseur in the art-collecting sense, or even in the coin-collecting sense, but a creative historical and archaeological scholar in the best sense, on the same lines as Brøndsted. The collection of his own coins is remarkable in being proportionately so rich in bronze, when a more fastidious collector might have aimed primarily for silver and gold.[98] This is not owing to the bronze being more economical to collect, but for quite different reasons, because it is often more various than the precious metal coinages, indeed was the only coinage produced for most Greek cities in Roman times, and was important in topographical studies since so many ancient towns are represented in the coinage, and the local coin finds, only by small change. Indeed some ancient sites have been identified precisely through the coins – usually bronze coins – found on site.

Thus for example, on Oeniadae in Acarnania, "now called Trikardhokastro".[99] His own coins included "all the varieties I could discover among about 800, which were found at Trikardhokastro" – i.e. the find coins, small change to be used locally, confirmed the identification of the ancient site. Again, on the question of the site of the ancient Pautalia in Thrace he narrows the possibilities through the coins: on one issue the words "EN ΠΑΙΩ, i.e. in Paeonia"; on another the representation of "a river god, with the legend CTPYMΩN ... It becomes highly probable that Pautalia is now represented by Ghiustendíl."[100] Or the site could explain the coins. At Acanthus in Macedonia, "some of [the] coins without legends were procured by me on the site of Acanthus" – i.e. the locus of discovery confirmed the identification of the otherwise mute coins.[101] We have already mentioned the wonderful gold medallion, which he purchased locally in Macedonia, thus confirming its authenticity.

To process this information Leake covered an amazingly broad field of sources: ancient mythology, for the explanation of the coin types, and ancient history, politics, genealogy, and even grammar and etymology for the explanation of the legends. On a single page in five different entries he could cite Thucydides, Cicero, Pliny, Strabo, Julius Pollux, Stephanus, and the Anonymous Periegeticus.[102] This is characteristic of the whole work.

His own experiences were brought to bear. He can say something about the Thessalian dialect on coins of Crannon in Thessaly because "in an inscription which I copied at Crannon ...", which not many numismatists can say; just as he refers to inscriptions which he has

96. Leake 1854, vii.
97. In this regard Leake's collection of material marched in parallel with that of Brøndsted. The latter worked at building the collection of sulphur casts at The Royal Collection of Coins and Medals, the National Museum of Denmark, along with the more obvious acquisitions of coins and books. At the time of his death he had acquired more than 10,000 casts. For an account see the article by Jørgen Steen Jensen in this publication.
98. This has long been a prejudice even among museum professionals. When Leake's collection, now in the Fitzwilliam Museum, was published in the series *Sylloge Nummorum Graecorum*, SNG 1940-1971, all of the gold and silver coins were included and illustrated, but only a fraction of the bronze, a great mass of which remain unpublished to this day.
99. Leake 1854, European Greece, 79. Again, "The copper coins of Blaundus found by Mr. W.J. Hamilton at Gobék, leave little doubt that the ruins at the neighbouring Sulimanlí are those of Blaundus", Leake 1854, Asiatic Greece, 34.
100. Leake 1854, European Greece, 84.
101. Leake 1854, European Greece, 2.
102. Leake 1854, Asiatic Greece, 52.

studied *in situ* on a number of occasions when they offer useful information.

All of this evidence, basically numismatic but rich in topographical and historical explanation, was made available in the text of his great catalogue. It is a book which requires some emendation today, in part because the attributions of some difficult coins have been improved since, but it set the example for the great national catalogues which followed it (in every sense), and has never been surpassed as a work of commitment, energy and ingenuity. Its essential spirit throughout can be garnered from a single example: "From this coin we learn ..."[103]

Conclusions

The intellectual activities of Peter Oluf Brøndsted, and those of his contemporary, William Martin Leake, a figure of similar importance, developed on one level in quite different ways. At one time, Brøndsted conducted archaeological excavations in Greece; at another he lectured at the University. Leake, who took no part in either of these activities, scoured the Greek countryside, measured it and understood it as neither Brøndsted nor anyone else had done; and in leisured retirement was able to work through and publish his accumulated materials with immense learning. But both, working just prior to the professionalization of Classical archaeology, were contributors to it. Indeed, it is on the basis of practices established by these scholars that much of what would become Classical archaeology would acquire definition. Thus Leake's work, requiring a combination of instruments and optically consistent and standardized media, constitutes "not only a definitive base for topographical fieldwork in Greece, but also a standard in the scholarly documentation of landscape".[104]

For Leake the physical items of his collection were guarantors of authoritative experience; they were linked both to their original situation on the ground in Greece and the circumstances of their removal to new surroundings, and therefore implied new meanings, in London. The details of the story were articulated through the genre of a travelogue. The travelogue was a mixed narrative for laying out details of the day-by-day experience (much like the field notebooks of a contemporary archaeological survey) and of the evidence enlisted in scholarly argumentation. This narrative also reveals details of the political relationships, sometimes becoming personal (at times mediated by a small and seemingly mundane written order), and of the entourage which facilitated Leake's ability to gather such materials in the first place.

Leake had his local informants, his attendant, his entourage; subsequently, his numberless contacts in London – relationships on the ground in the Morea or in Thessaly, then in like-minded society in London, with his collection or in the map room of the Royal Geographical Society. Add the participatory importance of media and things – the notebooks and sketches, sextants and coins, maps and electrotypes – all contributing to the production of knowledge. The importance of accurate maps in circulating information about the Greek countryside at a distance should not be overlooked. Leake's modes of engagement in translating the Greek countryside constitute repeatable bases for building further knowledge. The fundamental problems of what to describe, what to observe, what adjacent factors to take into account, what qualities of landscapes, sites, or things to mobilize – these continued to be addressed and mediated by a variety of actors and tools in the transformation of amateurs to professionals.[105]

The actors were primarily to be found in London where, by 1830, a new infrastructure was in place fa-

103. Leake 1854, Asiatic Greece, 125, in this case the racially mixed population of Synnada in Phrygia.

104. Witmore 2004, 135.

105. These should be viewed as 'multiple fields' where, as an alternative to the oversimplified notion of the 'field' counterpoised to the 'home base', a number of 'fields' – military institutions, skills and knowledge, financial organizations, learned societies, materials, instruments, media – come together in Leake's practice, Witmore 2004 and Witmore 2005.

cilitating the exchange of global information. London was a 'centre of calculation' where varied, yet connected, groups of enthusiasts coalesced in dinner clubs and scholarly societies dedicated to particular intellectual pursuits. All of this provided Leake with context.

Brøndsted in contrast led a life of constant motion. A professional polyglot, he moved easily (and frequently) among people of learning and status in the capitals of the major nations of Europe. But everything was aimed at learning. The Grand Tour, in his youth, initiated him into field archaeology; later he was professor at the University, and in his latter days – perhaps his most fruitful and enduring contribution to scholarship – Keeper of the Royal Collection of Coins and Medals. The years between saw him also as politician, at least as far as advising the Crown Prince, and outspoken diplomat. Whether he had any serious influence on the end of authoritarian government in Denmark cannot be easily determined, but there is no doubt that he spoke out to that end. It is important to note in that context that he was schooled in ancient thought, which he brought to bear on modern political issues. Brøndsted, like Leake, saw the classical Past as in no way foreign to the Present, and it was in that shared vision that they worked to bring the one world to be understood by the other.

It is easy to see how Brøndsted as both character and scholar would have fitted very well into the society of Leake's London in the early 1830s. He was welcomed by others like himself committed to the enthusiastic study of ancient archaeology and history, men like C.R. Cockerell whom he had come to know twenty years before in Greece. The whole of this society was open to him.[106] This much is demonstrated by the personal support which he received in the matter of the bronzes from Siris. Brøndsted offered these remains to the British Museum at a price; he could not afford to donate them. In the end the Museum was able to underwrite two hundred pounds but the total of £1000 had to be raised by subscription. The success of the venture is demonstrated by the list of subscribers printed in Brøndsted's subsequent publication, *The Bronzes of Siris now in the British Museum: an archaeological essay* (1836).[107] The subscribers numbered over 60, many of them members of the Society of Dilettanti, such as the Secretary, W.R. Hamilton, as well as other notables. Leake was down for a typical £10. The impressive elephant folio, with excellent plates, was in fact published by the Society.

All of this illustrates the importance of context in the study of influential disciplinary figures like William Martin Leake and Peter Oluf Brøndsted, whose achievements were possible precisely because of the rich social and intellectual setting in which they were able to operate.

106. At home Brøndsted had a different role to play as a professor, appointed to deliver public lectures on just these subjects at the University of Copenhagen. By contrast Leake and his fellows had no access to and no support at all from the British universities; it was only late in the nineteenth century that the subjects of Graeco-Roman archaeology and art history entered the curriculum, long after their development in the universities of Germany and Scandinavia, cf. Cust 1898, 178. In Britain most if not all of the interesting work in science and the humanities was being done by private individuals, some independent like Leake, others engaged in private occupations.

107. Brøndsted 1836.