

Nouveautés Lychnologiques Lychnological News



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Édition - Diffusion: LychnoServices
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Numérisation: Domenico Manco

Maquette - Composition: Domenico Manco

Imprimerie numérique: Calligraphy SA
3960 SIERRE

Photographies:

Couverture: Lampe à huile, type arabe (inv. 8915)
© Musée d'Art et d'Histoire, Genève
CHAMAN Atelier Multimédia

Articles: La responsabilité des crédits photographiques
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ISBN: 2-9700435-0-5

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Avant-propos

C'est à l'occasion du 1er congrès archéologique international d'étude sur le luminaire antique et de l'exposition « Lumière ! L'éclairage dans l'antiquité » organisée au Musée romain de Nyon que paraît « Nouveautés lychnologiques », un volume propre à favoriser la diffusion des connaissances et la confrontation des idées, mais offrant aussi aux spécialistes l'opportunité de soumettre à la critique de leurs pairs non seulement les résultats de leurs recherches mais encore de nouvelles manières d'interroger et de comprendre. La variété et la richesse des contributions illustrent l'intérêt et le renouveau des études relatives aux lampes, une discipline à part entière, certes, mais qui ne saurait se suffire à elle-même : il convient plus que jamais de se garder d'une spécialisation outrancière qui se ferait au préjudice d'une vue d'ensemble aussi large que possible. Si les études ponctuelles, mais précises, constituent un préalable nécessaire à toute synthèse, elles ne sauraient demeurer une fin en soi. La science lychnologique, à l'instar de la céramologie, de la numismatique, de l'archéo-botanique ou de la paléo-trichologie, reste indissociable de l'archéologie : à partir de vestiges matériels, aussi modestes soient-ils, il convient essentiellement de saisir l'homme dans sa complexité et sa relation avec l'univers. Dans cette quête, longue et difficile, parfois désespérée, il importe d'améliorer sans cesse les outils de détermination et d'interprétation, de veiller à la multiplicité et à la diversité des approches, qu'il s'agisse d'analyses de laboratoire, d'études typologiques, chrono-quantitatives, technologiques, iconographiques ou économiques, sans oublier les dimensions culturelles et anthropologiques et tout en restant à l'écoute d'autres spécialistes. C'est dans cette perspective que les auteurs du présent volume ont voulu placer leurs travaux et qu'il conviendra de situer les études à venir. La réflexion sur l'homme à partir des objets matériels et de leur contexte ne saurait se limiter à un simple exercice, aussi brillant soit-il : elle resterait totalement vaine si elle ne servait à allumer et à entretenir, goutte à goutte, notre propre lampe...

Genève, le 22 septembre 2003

Prof. Daniel Paunier

Éditorial

Décidément, l'année 2003 a été placée sous le signe des lampes et de la lumière. L'hiver nous quittait sur deux belles expositions sur ce thème, organisées par les collègues des musées de Veszprem (Hongrie) et de Jena (Allemagne).

Puis, au printemps, le 15 mai précisément, ce fut l'inauguration de l'exposition « LVMIERE ! L'éclairage dans l'Antiquité » au Musée romain de Nyon (Suisse).

Autour de cette exposition, le Musée romain et sa conservatrice Véronique Rey-Vodoz, avec l'aide du Professeur Daniel Paunier, ont accepté de soutenir le 1er Congrès international d'étude sur le luminaire antique, placé sous le haut patronage de M. Charles Kleiber, secrétaire d'Etat à la Science et à la Recherche.

Ce congrès, qui a réuni plus de quatre-vingt spécialistes en la matière de vingt-deux nationalités, a vu la fondation de l'Association Lychnologique Internationale.

En marge du congrès, LychnoServices, créé par Samuel Crettenand et Laurent Chrzanovski, se propose de mettre en valeur le patrimoine luminaire antique sous toutes ses formes, de la préhistoire au Moyen-âge, au moyen de quatre vecteurs d'information (site internet, publications, outils pédagogiques et bases de données scientifiques).

Nouveautés Lychnologiques / Lychnological News a donc remis au goût du jour le terme (ou plutôt le néologisme) "lychnologique", déjà proposé par les participants de la table ronde "*Les lampes de terre cuite en Méditerranée des origines à Justinien*", organisée par le C.N.R.S. (Centre National de la Recherche Scientifique) à Lyon, du 7 au 11 décembre 1981 (et publiée en 1987 à Paris sous la direction T. Oziol).

Ce volume propose au lecteur - spécialiste ou simple amateur - vingt et un articles de tous horizons (Allemagne, Belgique, Canada, Espagne, France, Israël, Italie, Liban, Palestine, Suède), présentant des lampes, presque toutes inédites, issues de fouilles ou de musées.

Par ailleurs, la thématique des premières lampes est traitée avec soin par Sophie A. De Beaune, et un article d'archéologie expérimentale de Christian-Heinrich Wunderlich complète ce recueil.

Nous vous souhaitons la plus agréable des lectures.

LychnoServices, Laurent Chrzanovski - octobre 2003

Lamps and lighting are definitely the prevailing themes of the year 2003. Winter ended with two wonderful exhibitions dedicated to this topic, exhibitions organized by colleagues of the museums of Veszprém in Hungary and of Jena in Germany. Then spring, and more precisely May 15th, saw the inauguration of the exhibition "LVMIERE! L'éclairage dans l'Antiquité" at the Roman Museum of Nyon (Switzerland).

Around this exhibition, the Roman Museum and its curator Ms Véronique Rey-Vodoz, in cooperation with Professor Daniel Paunier, have accepted to support the 1st International Study Congress on Ancient Lighting Devices, placed under the high patronage of Mr. Charles Kleiber, Secretary of State for Science and Research.

The congress, held from September 29th to October 4th, gathered experts in this field from twenty-two different countries. During the event, the International Lychnological Association (ILA) was officially founded.

In connection with the congress, LychnoServices, created by Samuel Crettenand and Laurent Chrzanovski, offers to highlight the heritage of ancient lighting devices in all its forms, from Prehistory to the Middle Ages, through four means of information (website, publications, educational tools and scientific databases).

Nouveautés Lychnologiques / Lychnological News has brought up to date the term (or rather the neologism) "lychnological", which was already suggested by the participants in the round table entitled "*Les lampes en terre cuite en Méditerranée des origines à Justinien*", organized by the CNRS¹ (National Centre for Scientific Research) in Lyon, from December 7th to 11th 1981 (and published in Paris in 1987 under T. Oziol's supervision).

This volume offers readers - specialists or amateurs - twenty-one papers from various countries (Belgium, Canada, France, Germany, Israel, Italy, Lebanon, Palestine, Spain, Sweden), featuring lamps coming from excavations or museums, most of them previously unpublished.

Moreover, some special topics have been included in the book: Ms Sophie A. De Beaune carefully details the theme of the first lamps and Mr. Christian-Heinrich Wunderlich delivers an interesting article of experimental archaeology.

We wish you pleasant reading.

LychnoServices, Laurent Chrzanovski - october 2003

Articles

Illuminating the Black Sea in Antiquity¹

John M. Fossey

In memoriam Otar D. Lordkipanidze

What follows will probably show that my sources are far from complete; however, they seem to be sufficient to reinforce both my visual impressions from limited travels around parts of the Black Sea and from the outcome of discussions with many colleagues archaeologists who work in the area. As someone used to dealing with material from different parts of the Classical world either from excavations or from museum collections, ranging from the Roman provinces of Western Europe, through the Mediterranean countries (North and South) to the Levant, and including parts of the Balkans, I am struck by an apparent anomaly in the Eastern Black Sea - the scarcity of findings of lamps which are so characteristic and basically so numerous in almost all other parts of that Classical world.

This scarcity indeed seems to be specific to the Eastern Black Sea, essentially to Kolchis and its immediate environs. On the West side of the sea, lamps are common in ancient Thrace (modern Bulgaria), as the corpus of Kuzmanov (1992) clearly demonstrates; they are equally so in Dacia, as Baluta (1965: 277) has shown for Apulum. To the North even such a remote site as Tanais has produced quantities of this artifact type (ARSENYEVA 1988) and indeed there is a considerable contrast between the numerous lamp types represented in the North Black Sea volume of the compendious series *Archeologia USSR* (KOSHELENKO, KRUGLIKOVA & DOLGORYKOV 1984: *passim*) and the mere two hand-made (?) examples presented in the corresponding volume for Kaukasia and Central Asia (KOSHELENKO 1985: 147 n° 11 & 149 n° 10 ?). In fact there are some other examples (cf. appendix) in Kolchis but they are very few and do not alter the basic image of extreme scarcity. What is more, we do know that the original Greek colonists brought their lamps with them but this very fact serves to highlight the lack of any real sequence of successors. This scarcity applies even to the clearly Greek colony sites such as

Gyenos, Dioskourias and Eshera (whatever its ancient name) just as it applies later on to such Romanised centres as Pityous.

If then lamps were not in frequent use in Kolchis, two questions need to be considered:

- Is there a reason for this situation, unusual according to Greek and Roman standards ?
- What did the people of Kolchis - including the Greeks succeeding to the first generation of colonists who had imported their lamps - use for most of their interior lighting ?

The reason for the paucity of lamps is perhaps not far to be sought. Commenting on a far-fetched attempt to explain the Golden Fleece of Kolchian myth as caused by liver-damage in sheep fed with olive leaves, David Braund (1994: 24 n. 100) says "Olive leaves are rare in Georgia". My own observations led me to the same conclusion, and Kevin Tuite, confirming (personal communication) that, like me, he had never seen olive trees or olives served as food in Georgia, adds that there is even no native word in Georgian for "olive" or "olive oil". Interestingly enough the Georgians use a generic word of Persian/Arabic origin for "oil", *zeti* and then form a periphrasis *zetis k'ili*, literally "fruit of the oil" to designate the "olive"; consequently "olive oil" becomes *zetis k'ili zeti*, "oil of the fruit of the oil"! So, olives and their oil are really unfamiliar to Georgia.

For Kolchis in particular (i.e. the Western, coastal half of modern Georgia) this is understandable. Kolchis has and had a climate which was notoriously wet for the ancient Greeks. Describing Phasis, the colony in the middle of the East Black Sea coast, at the mouth of the principal river of Kolchis, the Phasis River (the modern *Rioni*), and in particular its inhabitants, an oft-quoted

passage from Hippokrates is quite clear:

περὶ δὲ τῶν ἐν Φάσι, ἡ χώρα ἐκείνη ἐλώδης ἐστὶ καὶ θερμὴ καὶ ὕδατεινὴ καὶ δασεῖα· ὄμβροι τε αὐτόθι γίνονται πᾶσαν ὥρην πολλοὶ τε καὶ ἰσχυροὶ· ἢ τε δίαιτα τοῖσι ἀνθρώποισι ἐν τοῖσι ἔλεσι ἐστίν· τὰ τε οἰκοδομήματα ξύλινα καὶ καλάμινα ἐν τοῖσι ὕδασι μεμηξάνημένα· ὀλίγη τε χρέονται τῇ βαδίσει κατὰ τὴν πόλιν καὶ τὸ ἐμπόριον, ἀλλὰ μονοξύλοισι διαπλεύουσι ἄνω καὶ κάτω· διώρυχες γὰρ πολλαὶ εἰσι. Τὰ δὲ ὕδατα θερμὰ καὶ στάσιμα πίνουσι, ὑπὸ τοῦ ἡλίου σηπόμενα καὶ ὑπὸ τῶν ὄμβρων ἐπαυξόμενα. αὐτὸς τε ὁ Φᾶσις στασιμώτατος πάντων τῶν ποταμῶν καὶ ῥέων ἡπιώτατος· οἱ τε καρποὶ οἱ γινόμενοι αὐτόθι πάντες ἀναλδέες εἰσι καὶ τεθλησμένοι, καὶ ἀτελέες ὑπὸ πολυπληθείης τοῦ ὕδατος· διὸ καὶ οὐ πεπαίνονται· ἢ τε πολὺς κατέχει τὴν χώραν ἀπὸ τῶν ὑδάτων αἱ τε ὥραι οὐ πολὺ μεταλλάσουσι οὔτε πρὸς τὸ πνίγος οὔτε πρὸς τὸ ψύχος· τὰ τε πνεύματα τὰ πολλὰ νότια πλὴν αὐρῆς μῆς ἐπιχωρίας· αὕτη δὲ πνέει ἐνίοτε βίαιος καὶ χαλεπὴ καὶ θερμὴ, καὶ Κέγχρονα ὀνομάζουσι τοῦτο τὸ πνεῦμα. ὁ δὲ βορέης οὐ σφόδρα ἀφικνέεται· ὁκόταν δὲ πνέη, ἀσθενὴς καὶ βληχρὸς.

Airs, Waters, Places 15

“Concerning those in Phasis, that land is marshy, hot, humid, and wooded. In every season here the rains are frequent and heavy. Here men live in marshes. The dwellings are of wood and reed constructed in the water. The inhabitants seldom go on foot to the polis and the emporium, but canoe up and down in dug-outs, for there are many canals. The water they drink is hot and stagnant, corrupted by the sun and swollen by the rains. The Phasis itself is the most stagnant of rivers and flows most sluggishly. And all the crops which grow here are bad, of poor quality and without taste, on account of the excess of water. Consequently they do not ripen. Much mist enshrouds the land because of the water (description of the physical aspect of the people) The seasons do not vary much, either in heat or in cold. The winds are mostly moist, except a breeze typical of the country, called *Kenkhron*, which sometimes blows strong, violent and hot. The north wind makes little impact, and when it blows it is weak and feeble”.

(translation D. Braund).

While much of what Hippokrates says is particularly relevant to the marshy conditions of the colony in Phasis itself, the question of rainfalls and winds applies, of course, to the whole of the Kolkhian Plain and its surroundings. The scenery is definitely not propitious to olive cultivation.

The unproductive nature of Kolkhis, then more commonly known as Lazike, was commented upon a millenium later by Prokopios:

1. αὐτοὶ μὲν γὰρ οὔτε ἄλας οὔτε σίτον οὔτε ἄλλο τι ἀγαθὸν ἔχουσι, δέρρεις δὲ καὶ βύρσας καὶ ἀνδράποδα παρεχόμενοι τὰ σφίσι ἐπιτεήδεια ἐκομίζοντο.

Peri ton polemon ii.15,5

“For they (sc. The people of Lazike) have neither salt, nor grain, nor any other good produced but by exchanging skins, hides and slaves, they were able to obtain the necessary supplies for themselves.”

2. χωρὶς δὲ τούτων ἄλλες μὲν τῆς Λαζικῆς οὐδαμῆ γίνονται, οὐ μὲν οὔτε σίτος οὔτε οἶνος οὔτε τι ἄλλο ἀγαθὸν φύεται. ἐκ δὲ τῶν Ῥωμαίων τῶν παραλίων ἅπαντα ταῖς ναῦσιν ἐπιεσέρχεται σφίσι, καὶ ταῦτα οὐ χρυσίον τοῖς συμβάλλουσι προἰεμένοις, ἀλλὰ δέρρεις τε καὶ ἀνδράποδα καὶ εἴ τι ἄλλο ἐνταῦθα κατὰ πολὺ περιεῖναι ξυμβαίνει

peri ton polemon ii.28,27-28

“Apart from these factors, no salt pans can be found anywhere in Lazike, neither grain, nor wine nor anything else that grows, but from the Romans on the coast everything comes in to them by ship and they pay the providers of goods, not with gold, but with skins, slaves and anything else that they happen to have in quantity”.

Prokopios’s remarks on the Lazikan (i.e. Kolkhidian) economy have been examined in detail by Braund (1991) just as the role of Kolkhis as a source of slaves is analysed by Braund and Tsetskhladze (1989).

If Prokopios seems rather far remote from Hippokrates, the gap is partly bridged by another well-known text, this time written by the pro-Roman Hellenistic writer Polybios who, describing the trade routing through Byzantion and the Bosphoros, says:

πρὸς μὲν γὰρ τὰς ἀναγκαίας τοῦ βίου χρείας τὰ τε θρέμματα καὶ τὸ τῶν εἰς τὰς δουλείας ἀγομένων σωμάτων πλῆθος οἱ κατὰ τὸν Πόντον ἡμῖν τόποι παρασκευάζουσι δαμιλέστατον καὶ χρησιμώτατον ὁμολογουμένως, πρὸς δὲ περιουσίαν μέλι κηρὸν τάριχος ἀφθόνως ἡμῖν χορηγοῦσιν. Δέχονται γὰρ μὴν τῶν ἐν τοῖς παρ’ ἡμῖν τόποις περιττευόντων ἔλαιον καὶ πᾶν οἴνου γένος. σίτω δ’ ἀμείβονται, ποτὲ μὲν εὐκαίρως δίδοντες ποτὲ δὲ λαμβάνοντες.

Historiai iv.38,4-5

“With regard to the necessities of life it is agreed that the people living around the Pontos provide us with cattle and the highest quality and largest number of those sold into slavery, while of luxuries they supply

us richly with honey, wax and pickled fish. In return they take from our parts of the world the surplus of olive oil and all kinds of wine. In grain there is an exchange with them sometimes opportunely supplying, sometimes being supplied.”

While this account is not specific to Kolkhis alone, the particular relevance of slaves has already been shown, and Braund (1994: 56-57) has also commented on the special nature of Kolkhian cattle (and the dependent leather industry) as well as the paucity of grain, a description that could hardly be applied to the steppes North of the Pontos as they are rich in corn. What is more, the export of honey and wax is particularly apposite of Kolkhis where apiculture is widely practised to this day. The trade in Greek wines to the Pontos is well attested by the findings of many types of Aigaian amphorae around the Black Sea despite the also well-attested local productions seen in the wide movements of Kolkhian, Sinopean and Herakleiot amphorae (cf. GARLAN 1999, especially part 2, for a useful collection of recent studies) in that area particularly. The comment about the importation of Greek olive oil is of major interest to us as far as Kolkhis is concerned for we have seen earlier why the olive is not grown at all here. Polybios’s remark here could reinforce the idea that the comparative absence of oil lamps in Kolkhis may have a simple explanation: the fuel needed to burn in such lamps was a rare and imported commodity and thus even more expensive than in Greece (BRUNEAU 1980: 39).

So, what did the Kolkhis inhabitants use for their interior lighting? We have already encountered one possible answer in the discussion of apiculture. Since Kolkhis produced honey and wax in quantities allowing exportation, it certainly had enough wax for making candles, either taper-shaped or in the form of bowls with wicks inserted. There is, however, another possible lighting fuel. Xenophon’s account of his troops marching along the South East coast of the Black Sea briefly mentions some of the habits of the Mossynoikoi:

καὶ δελφίνων τεμάχη ἐν ἀμφορεῦσιν ἠύρισκετο
τεταριχενμένα καὶ στέαρ ἐν τεύχεσι τῶν δελφίνων,
ᾧ ἐχρῶντο οἱ Μοσσύνοικοι καθάπερ οἱ Ἕλληνες
τῷ ἐλαίῳ

Anabasis v.4,28

“Sliced flesh of dolphins was also found, pickled in storage jars, and dolphin fat in other vessels; the Mossynoikoi used this in the same way as the Greeks used olive oil.”

A similar observation can be made some four centuries later for the Khalybes, neighbours of the Mossynoikoi:

δελεαζομένους μόνοι οὔτοι κατακόπτουσι τοὺς
δελφίνας καὶ τῷ στέατι πολλῶ χρωῶνται πρὸς
ἅπαντα

Strabon, *Geographia* xii.3,19

“They (sc. The Khalybes) are the only ones to catch the dolphins with bait and to cut them up; they use the abundant fat for all purposes.”

Strabon has just previously commented upon the presence of several species of tuna fish with which the dolphins feed themselves in the waters of this part of the Black Sea, which implies a rich supply of well-fattened dolphins.

The comparative rarity of lamps in the East Black Sea, particularly in Kolkhis, including the Eastern part of the South coast, is striking, but is not necessarily surprising after all. In this area the lack of olive oil may simply and logically have led people, including the Greek immigrants and their Roman successors, to use local resources available for their lighting, namely wax and dolphin blubber (similarly to the Inuits’ use of whale blubber). The rare oil lamps of which there is evidence were probably used only on special occasions and for luxury events. With the materials available locally, i.e. wax and blubber, which were essentially used in their solid form, there was no risk of spilling or flaring; thus they did not require closed shapes for their safe use, as developed in most of the Classical world for the liquid olive oil. It is worth remembering that the closed shapes were already developing by the time of the arrival of the Greek colonists in the Eastern Black Sea.

APPENDIX: Oil lamps found in Kolkhis

What follows is not meant to be an exhaustive list. Much of it, for finds up to c. 1992, was kindly provided to me some while ago by my friend Gocha Tsetskhldadze whose linguistic skills give him much more reliable access to the Georgian and Russian archaeological literature. I have supplemented his list with sources available to me in Montreal. The thinness of the resulting list aims to illustrate my main point about the comparative rarity in Kolkhis of ancient oil lamps, artefacts so commonly found elsewhere in the Classical world. Another colleague, with whom I had discussed this idea a couple of years ago, said to me: “but there are lamps in Kolkhis” and he was correct as the list shows; the point, however, is not whether lamps exist or not there, but rather why they are so few.

Gyenos:

- a 6th century BCE open wheel-turned lamp of unclear type, SHAMBA 1988: pl. XII, 23.
- a late Classical / early Hellenistic handmade lamp reminiscent of some found at Tanais (ARSENYEVA

1988: pl. XLV, 4 & XLVII, 3, SHAMBA 1988: pl. XIX, 1.

Vani:

- one elegant bronze lamp imitating the Knidos type dating to the end of the 2nd century - beginning of the 1st century BCE, LORDKIPANIDZE 1972: n° 23; plainly a solitary luxury item (N.B. LORDKIPANIDZE 1983, with all its Greek material, especially Hellenistic, has not a single lamp).

Kvashta:

- a late 7th - first half of 6th century BCE open, wheel-turned (?) lamp of Howland (1958) types 9 & 11, KAKHIDZE & MAMELADZE 1988: pl. XXXIII, 6.

Phasis region:

- a 6th - early 5th century BCE open, wheel-turned lamp of Howland (1958) type 12, MIKELADZE 1978: pl. XXXVI n° 05 S1-74-299.

Eshera:

- the lower half of a Hellenistic, mould-made (?) lamp, SHAMBA 1980: pl. LIV, n° 6.
- three "Ephesian" mould-made lamps: one of Howland (1958) type 49A, last quarter 2nd century BCE - first quarter 1st century CE, *ibid.* n° 10; one of Howland (1958) type 49B, first half 1st century CE, *ibid.* n° 9; one of Howland (1958) type 54A, early 1st century BCE - early 1st century CE, *ibid.* n° 8.

Dioskourias region:

- one mould-made lamp, Loeschcke (1919) type VIII with heart-shaped nozzle, 2nd century CE, VORONOV 1969: pl. XXX, n° 19.
- one mould-made lamp, also Loeschcke (1919) type VIII but with u-shaped nozzle, 2nd century CE, *ibid.* n° 20.
- two boot-shaped, wheel-turned lamps (perhaps handmade imitations? cf. ARSENYENVA 1988: pl. III, 1-4), late Hellenistic/early Imperial, *ibid.* n° 21 and 23.
- one palaeochristian handmade lamp, form derived from "Frog lamps", with incised groove, 5th - 6th century CE, *ibid.* n° 22.

Pityous:

- a saucer lamp with four pinched spouts, handmade, of a type which, in the East Mediterranean, would date to the (Middle?) Bronze Age although the chronology of saucer ("cocked-hat") lamps is far from clear and such a dating is difficult to apply in this case, APAKIDZE 1977: n° 439.
- three coarse handmade lamps of a type seen at Tanaïs (cf. ARSENYEVA 1988: pl. XXXVI) where they

seem to date to the 3rd century BCE, *ibid.* n° 180, 181 and 184.

- one boot-shaped, wheel-turned lamp, late Hellenistic/early Imperial, APAKIDZE 1977: n° 458.
- several wheel-turned, boot-shaped lamps, Bauer (1947) type VIII, dating 2nd - 3rd century CE, APAKIDZE 1977: n° 441, 445, 451. 452, 455, 464, 467, 476, 479 and 1978: n° 81 (also several other possible fragments, 1977: n° 448, 449, 453, 456, 462, 464, and 486).
- one lamp from the 3rd century CE date similar to Bauer (1947: 56-57) n° 338 and 344, APAKIDZE 1977: n° 442, and four others with a more ornate moulded shape (*ibid.* n° 440, 443, 444 and 469).
- two lamps that possibly look like the 1st - 2nd century CE "à côtes" type of Dumoulin (1965: 75, fig. 84) but with a different handle and spout, APAKIDZE 1977: n° 473 and 474.
- two lamps, variants of Kuzmanov (1992) Balkan type XLI (4th - 5th century CE) or type XLII (3rd - 4th century CE), APAKIDZE 1977: n° 465 and 478.
- two mould-made lamps, one decorated and one plain, similar to the 3rd century CE type XXVII of Kuzmanov (1992), APAKIDZE 1977: n° 475 and 477 (fragments n° 450, 454, 460 and 461 possibly the same).
- four fragments of "North African" 4th - 6th century CE lamps of Hayes (1972) type II, APAKIDZE 1977: n° 457, 463 (?), 470 and 472.
- one moulded lamp with globular decoration of Broneer type XXIX, group A, 6th century, APAKIDZE 1977: n° 182.
- one wheel-made lamp with globular decoration of "Arabic" type, mid 6th - mid 7th century CE, APAKIDZE 1977: n° 183.
- two fragments with vertical strap handles of unclear type and date, APAKIDZE 1977: n° 459 and 468.

Notes

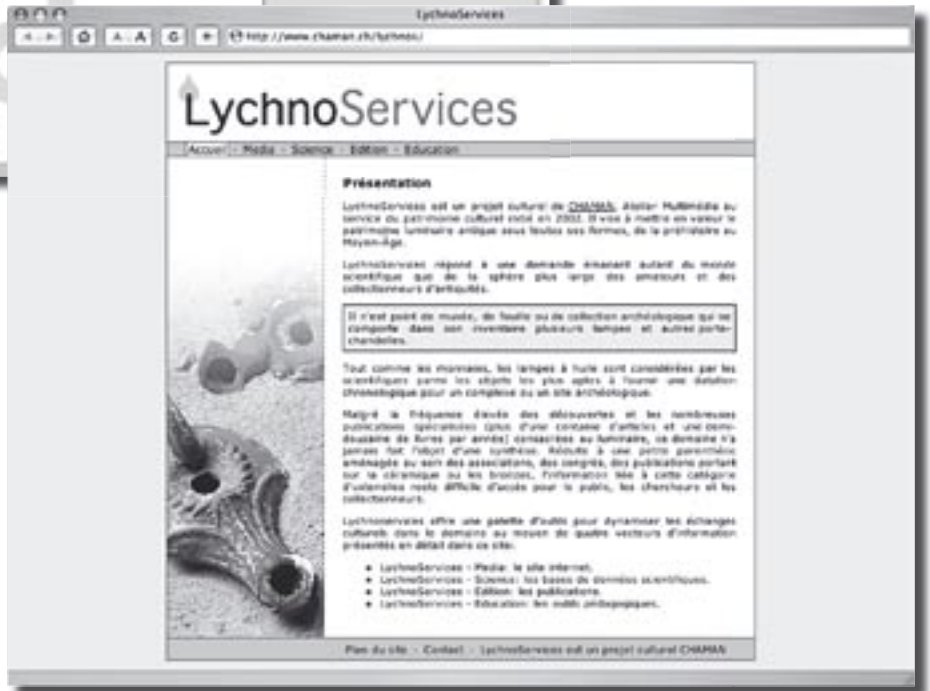
- 1 I am very grateful to several colleagues and friends for their help and advice in preparing this paper: Dr. Gocha Tsetskhladze (Royal Holloway and Bedford New College, University of London), Prof. Kevin Tuite (Université de Montreal), Drs. Dominique Kasab-Tezgör and Jacques Morin (Bilkent University) and my wife Eléni P. Zoitopoulou (Redpath Museum, McGill University, Montreal).

Bibliography

- APAKIDZE, Andria, 1977: *The Great Pitiunt I* (Tbilisi - in Georgian).
- APAKIDZE, Andria, 1978: *The Great Pitiunt III* (Tbilisi - in Georgian).
- ARSENYEVA, T.M., 1988: *СВЕТИЛЬНИКИ ТАНАИСА* (Moscow).
- BALUTA, Closca L., 1965: "Opatele romane de la Apulum (II)", *Apulum, Acta Musei Apulensis* 5: 271-295.
- BAUR, P.V.C., 1947: *The Excavations at Dura-Europos, Final Report IV.3: The Lamps* (New Haven, Connecticut).
- BRAUND, David, 1991: "Procopius on the Economy of Lazica", *Classical Quarterly* 41: 221-225.
- BRAUND, David, 1994: *Georgia in Antiquity: A History of Colchis and Transcaucasian Iberia 550 BC-AD 562* (Oxford).
- BRAUND, David & TSETSKHLADZE, Gocha, 1989: The Export of Slaves from Colchis", *Classical Quarterly* 39: 114-125.
- BRUNEAU, Philippe, 1980: "Les lampes et l'histoire économique et sociale de la Grèce", *Céramiques hellénistiques et romaines* (= *Annales littéraires de l'Université de Besançon* 242) 19-54.
- DUMOULIN, André, 1965: "Les puits et fosses de la colline Saint-Jacques à Cavaillon (Vaucluse)", *Gallia* XXIII, fasc. 1: 1-85.
- GARLAN, Yvon (ed.), 1999: *Production et commerce des amphores anciennes en Mer Noire, Colloque international organisé à Istanbul, 25-28 mai 1994* (Aix-en-Provence).
- HAYES, J.W., 1972: *Late Roman Pottery* (London).
- HOWLAND, Richard Hubbard, 1958: *The Athenian Agora, Results of the Excavations Conducted by the American School of Classical Studies at Athens IV: Greek Lamps and their Survivals* (Princeton, NJ).
- KAKHIDZE, A. & MAMELADZE, Sh., 1988: "The Ancient Settlement of Kvashta" in *Sites of South-Western Georgia* (Tbilisi): 47 sqq. (in Georgian).
- KOSHELENKO, G.A., KRUGLIKOVA, I.T. & DOLGORUKOV, V.S. (ed.), 1984: *Археология СССР: Античные государства Северного Причерноморья* (Moscow).
- KOSHELENKO, G.A. (ed.), 1985: *Археология СССР: Древнейшие государства Кавказа И Средней Азии* (Moscow).
- KUZMANOV, Georgi, 1992: *Антични Лампн, Колекция на Иаинална Археологически Музей* (Sofia).
- LORDKIPANIDZE, Otar (ed.), 1972: *Вани I, Археологические Раскопки 1947-1969* (Tbilisi).
- LORDKIPANIDZE, Otar (ed.), 1983: *Вани VII, Археологические Раскопки* (Tbilisi).
- MIKELADZE, T., 1978: *Archaeological Investigations on the Lower Rioni (Phasis)* (Tbilisi).
- ШАМБА, Г.К., 1980: *Зшерское Городище (Основные результаты археологических раскопок 1969, 1970-1977 гг.)* (Tbilisi).
- ШАМБА, S.M., 1988: *Гюэнос I* (Tbilisi).
- VORONOV, Y. N., 1969: *Археологическая Карта Абхазии* (Sukhumi).

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