RHGT, Vol. XVII, Issues 33-34, pp. 115 - 136

SANTARÉM, THE PARADISE OF DELIGHTS: FINDING STRABO'S MŌRON AND ITS LOST ISLAND, WITH A NEW ETYMOLOGY FOR MŌRON

Jorge M. SOBOTA

ISM Paris, France, ORCID 0000-0003-1530-2290

Email: jmsobota@protonmail.ch

Abstract: The city of Mōron mentioned by Strabo would be at either Santarém or Chões de Alpompé, but not at the Alto do Castelo, in Alpiarça. This was the conclusion of a study by the Deutsches Archäologisches Institut in 1982-88. Other authors point to Almeirim, a city eight kilometres south of Alpiarça. Schulten proposes Mōron is the island and castle of Almourol (Tancos). There are at least five hypotheses suggesting where the city of Mōron was. This stems from a restricted understanding of the full meaning of the Greek word $\kappa\alpha\tau\dot{\alpha}$. In this article, I clarify the most used meaning of $\kappa\alpha\tau\dot{\alpha}$, I propose a new etymology for Mōron and retrieve historical information about the place of an old arm of the river Tagus and of the Lagoon of Almeirim, which pointed me to the right place of the island mentioned by Strabo, which was close to Mōron. If my suggestions are correct, these 2,000-year-old riddles are solved.

Key words: Strabo, Santarém, Mōron, mor(r)-, Island of Mōron

1. INTRODUCTION

This article is based on a 2020 pre-print that was never published nor peer-reviewed. I correct now its several missteps and wrong assumptions. After their excavations in the Tagus River valley from 1982 to 1988, Philine Kalb and Martin Hock from the Deutsches Archäologisches Institut published their article on Mōron [Kalb, P. and Hock, M. (1988)]. In the first article published by them in 1982, they suggested that the oppidum of Mōron was situated in the town of Alpiarça (Alto do Castelo). In their second article, published in 1988, they discarded Alpiarça as an option, but could not decide on the place of the oppidum of Mōron between the two alternatives that remained after their critical analysis: either Chões de Alpompé or Santarém. The Portuguese translation from Geografika by Deserto from the Department of Philology of the University of Coimbra [Deserto et al. (2017)] suggests Mōron was actually at Chões de Alpompé. Mōron was the Alcáçova quarter of Santarém, according to [Mantas, V.G.



(1996)] and [Mendes Correa, A.A. (1934)]. Mōron is the place of Chã de Marcos, in front of the island of Almourol (Tancos), as recorded by [Schulten, A. (1928-1933)]. Before them, [Grenet, P. (1781)], [Aynès, F.D. (1804)], [Langlois, H. (1830)], [Arrowsmith, A. (1832)], Hamilton & Falconer (1877), and Horace L. Jones (1923) indicated in their respective Geografika analysis or translations that Mōron would be the present-day town of "Al-Merim" (Almeirim). The current article finds precisely where the oppidum of Mōron and the island close to it are, based on Strabo's Geografika 3:3:1.

The root of this issue is one Greek word: $k\alpha\tau\dot{\alpha}$. Müllero and other researchers translated it into Latin *prope*. A string of Geografika editions followed suit in English and other languages, hereby propagating Müllero's misstep. The Latin word prope means *near*, *by*, *close to*, *opposite*, and was imported into Latin as *cata*, which means "by", *close to*. However, the prevalent meaning of the source Greek word $\kappa\alpha\tau\dot{\alpha}$ is *down*, *down from*. That is why so many researchers during the last 150 years could not assert with any reasonable degree of certainty the whereabouts of the oppidum of Mōron. When I read Geografika 3:31 with the prevalent meaning of $\kappa\alpha\tau\dot{\alpha}$, with a new etymology for Mōron and rescuing historical data from an old arm of the river Tagus, I found it is clear, with a reasonable degree of certainty, where that oppidum is and where the island close to it was, thereby resolving this 2,000-year-old riddle.

2. METHODOLOGY

The research was executed on multiple fronts, starting from a pre-print text I drafted in 2020. During these two years of research, the pre-print became obsolete along with several incorrections in it. It led to inconclusive suggestions, which are being corrected through this article. The historical and distance measurement research front led us to establish, which type of stadium was used in this part of the text from Geografika, by taking a known sample distance mentioned in the text and checking it with online maps. Once the right stadium type was stablished, the other stadia measurements mentioned in the selected text were found to match with present-day distances, with negligible differences. The source of Strabo was most likely an ancient portolan chart and for this reason the distances are measured from the mouth of the river Tagus upstream from that river. The caveat here is that there is no way of finding out the course of the Tagus 2,000 years ago. Therefore, for the purposes of this article, I had to consider that there were no significant changes in the stretch that goes from the Tagus mouth to where Strabo places Moron (500 stadia upstream from the sea). Upstream from this point, there were significant artificial changes in the course of the Tagus, which are mentioned in medieval documents. However, they did not impact in the measurements downstream from Moron to the sea, which are the ones that matter to us in this article.

On the etymological front, the work was two-pronged. On the one hand, I determined that the most frequent meaning of the Greek word $\kappa\alpha\tau\dot{\alpha}$ was lost in its translation into Latin *prope* (near, by, close to, opposite) by Müllero [Müllero, C. and Dübnero, F. (1853)] and from Latin into English [Hamilton, H.C. and Falconer W. (1903)]. Consequently, all the articles, books, and translated Geografika prints that stem from the Müllero Latin translation and the English translation by Hamilton and Falconer propagated this lapse in meaning during the last 160 years. On the other hand, the work focused on finding the most probable etymology for Mōron and the prevalent meaning of the Greek word $k\alpha\tau\dot{\alpha}$, and matching it with the description of that oppidum by Strabo

enabled me to set its place and that of the island (which I call from now on the Island of Moron) with a reasonable degree of certainty.

3. RESULTS

Subjects: • Our sources at Geografika • "Moro or Mōron? • kατά is the key word • Stadia measurements from a lost portolan • Delphi, Olympian or Roman stadium? • The mouth of the Tagus • Fairly Precise Measurements • Mōron, suggested locations • Where Strabo places Mōron • Etymologies for Mōron • Analysing each suggested place for Mōron • The island κατά (below, down from) • The Roman fort at Alto do Castelo (Alpiarça) and its economic significance • Mōron, an important logistics hub • Mōron • Santarém, the Paradise of Delight.

Our sources at Geografika: around thirty Geografika manuscripts survived to this day. The oldest one is the GREC1397 (12th Century), in Greek, taken to France by Maria De Médici (1575-1642). The oldest Latin printed edition in Western Europe is from 1469. We use the Strabonis Geografika by Carolus Müllero and F. Dübner [Müllero, C. and Dübnero, F. (1853)] as the Greek original and its Latin translation, and the English translation of Hamilton and Falconer [Hamilton, H.C. and Falconer W. (1903)]. The Müllero and the Meinecke [Meinecke, A. (1877)] versions both have the same Greek wording in this part of Geografika.

The translation of the words marked in bold will be corrected during this article:

"δύο δ' ἀναχύσεις ἐν τοῖς ὑπερκειμένοις ποιεῖται πεδίοις, ὅταν αἱ πλῆμαι γίνωνται, ὅστε πελαγίζειν μὲν ἐπὶ ἑκατὸν καὶ πεντήκοντα σταδίους καὶ ποιεῖν πλωτὸν τὸ πεδίον, ἐν δὲ τῇ ἐπάνω ἀναχύσει καὶ νησίον ἀπολαμβάνειν ὅσον τριάκοντα σταδίων τὸ μῆκος, πλάτος δὲ μικρὸν ἀπολεῖπον τοῦ μήκους, εὐαλσὲς καὶ εὐάμπελον. κεῖται δ' ἡ νῆσος κατὰ Μόρωνα πόλιν εὖ κειμένην ἐν ὄρει τοῦ ποταμοῦ πλησίον, ἀφεστῶσαν τῆς θαλάττης ὅσον πεντακοσίους σταδίους, ἔχουσαν δὲ καὶ χώραν ἀγαθὴν τὴν πέριζ καὶ τοὺς ἀνάπλους εὐπετεῖς μέχρι μὲν πολλοῦ καὶ μεγάλοις σκάφεσι, τὸ δὲ λοιπὸν τοῖς ποταμίοις: καὶ ὑπὲρ τὸν Μόρωνα δ' ἔτι μακρότερος ἀνάπλους ἐστί." [Müllero, C. and Dübnero, F. (1853), v.1, p.126-127]

"Quum autem mare effluit, duas Tagus effusiones facit in campos supra ostia positos, ita ut stagnet maris instar campus ad centum et quinquaginta stadia et navigabilis sit, in superior effusione autem insula quoque includatur longitudine triginta stadiorum, paeneque tanta etiam latitudine, foecunda et vitifera. Sita est insula prope Moronem [al. Langobrigam], oppidum bene situm in monte prope fluvium, a mari distans fere quingenta stadia, habens etiam circum se solum bonum, et sursum navigationes faciles, aliquantisper etiam magnis scaphis, deinde fluvialibus et super Mōronem adhuc longior est sursum navigatio." [Müllero, C. and Dübnero, F. (1853), v.1, p.126-127]

"At the flood-tide, the Tagus forms two estuaries in the plains that lie above it, so that the plain is inundated and rendered navigable for a distance of 150 stadia. In the upper estuary, an island is formed about 30 stadia in length, and nearly equal in breadth, which is **fertile**, and has excellent vines. The island lies near to Moro,

a city **happily situated** on a mountain close to the river, and about 500 stadia from the sea. The country surrounding it is very fine, and the ascent [of the Tagus] for a considerable way practicable for vessels of a large size, the remainder is performed in riverboats. Above Moro, it is navigable for a yet longer distance. ". [Hamilton, H.C. and Falconer W. (1903), v.1, p.227-228]

'Moro or Mōron? Concerning the city of Mōron, the original Greek version from Müllero uses Μόρωνα. Hamilton & Falconer (1854) write it Moro (see quoted text). The English translation of Horace L. Jones (1917) writes Mōron. In this article, we use the spelling Mōron.

Kατά is the key word. In the Greek version of Müllero, we see the words εὐαλσὲς and εὐάμπελον. The first means with beautiful groves and the second means fine vines [Verkerk, P. (2020)]. However, Müllero translates them as "...foecunda et vitifera" and Hamilton follows him: "...which is fertile, and has excellent vines". Horace Jones translates it differently: "which has fine groves and vines" [Jones, H. L. (1923), v.3-5, p.63]. Based on the Greek text from Müllero, the revised translation should be "with beautiful groves and fine vines" (εὐαλσὲς καὶ εὐάμπελον). Müllero translates εὖ κειμένην as bene situm, which is correct. Greek εὖ and Latin bene mean well, but Hamilton recreates that as happily situated. His translation should better read well placed.

The key word for a significant new understanding of this text from Strabo is the Greek word κατὰ. This word has been imported into Latin as *cata*, meaning "by", *close to*. However, Liddel gives us its full meaning: κατὰ generally means *downwards*. In its genitive form, it can mean *down from, down upon, down into* and other meanings that do not concern a geographical or topographical description we look for, like *concerning* and *against* (in the sense of *hostility*). In its accusative form, κατὰ denotes motion downwards: *downstream, throughout (a space)* and *opposite*. [Liddel, H.G. and Scott, R. (1901)]. The Homeric Dictionary mentions that κατά means *down* and *down from* (gen.) [Autenrieth, G. (1904), p.154]. Also, κατά would be cognate with Hittite *katta, kattan*, that mean "down with, alongside" [Sturtevant, E.H. (1927), p.249] and Tocharian B kätk²- "to lower, to set down", and Hittite *kattkatya* (to kneel, go down) [Adams, Douglas Q. (2013)].

We can see that the prevailing meaning for κατά is *down* and not *near*, *by*, *close to*, or *opposite* (Latin *prope*). When Müllero translates $\kappa \alpha \tau \dot{\alpha}$ into Latin *prope* (*near*, *by*, *close to*, *opposite*) he is not wrong, but the main meaning of κατά (down, down from) is lost in his translation and the translations stemming from his own, suffer the same fate. The recent Portuguese version of Geografika translates it as *diante de* (*opposite*, *in front of*) [Deserto et al.(2017), p.59, Book III, introduction, translation from Greek and notes)]. This Portuguese translation was based, among other sources, on the Stefan Radt translation from Greek [Radt, S. (2003)]. I could not access this book from Radt and cannot say if the Greek source text from Radt mentions the word $\kappa \alpha \tau \dot{\alpha}$ (down, down from) in it. If we adopt the prevalent meaning for $\kappa \alpha \tau \dot{\alpha}$, the selected text describes a very different scenario: the island is not near, by, close to or in front of Mōron, but down from it. Now, we are not in the Alps, where a place *down from* could be kilometres down at the feet of a high mountain. We are in the great plain of the Tagus

valley. Here, we may say that the town of Almeirim is *close* or *near* the town of Alpiarça, although they are eight kilometres apart. But, in this part of the Tagus floodplain, *down from* means a much closer proximity because the hills close to the river are never over 130 meters higher than their surroundings.

Taking into account the suggested rectifications up until now, the corrected English translation by Hamilton would be as follows.

"At the flood-tide, the Tagus forms two estuaries in the plains that lie above it, so that the plain is inundated and rendered navigable for a distance of 150 stadia. In the upper estuary, an island is formed about 30 stadia in length, and nearly equal in breadth with beautiful groves and fine vines. The island lies down from Mōron (hod. Al-Merim), a city well situated on a mountain close to the river, and about 500 stadia from the sea". [Hamilton, H.C. and Falconer W. (1903), v.1, p.227-228]

Stadia measurements from a lost portolan. Born in Anatolia, Strabo travelled through Italy and North Africa, but never visited the Iberian Peninsula. What he wrote about Mōron was based on a primary source. The distances listed by Strabo take as the starting point the mouth of the river Tagus and the area calculated upstream of the river. The primary source here is probably a ship captain, who navigated upstream along the Tagus River waterway more than 2,000 years ago. Strabo based this part of Geografika on an ancient portolan chart. In its last stretch up around 110 kilometres from its mouth, the Tagus is a plain river, and in ancient times, it had many meanders and canals that changed periodically according to erosion and floods. This poses a problem. Nobody knows where the main Tagus waterway was 2,000 years ago. For this reason, I had to measure the distances upstream from the Tagus following its present course. Yes, the course of the Tagus changed during the last 2,000 years, but as far as I know, there were no significant artificial changes during the period we are analysing, which covers 500 stadia upstream from the Tagus mouth at the sea.

Delphi, Olympian, or Roman Stadium? Strabo also used the Delphi and Olympian stadium in his book Geografika. Why did he not standardise them into one type of stadium? Because he collected the information for his book from several primary sources. Different primary sources used different types of stadia. After comparing each type of stadium, I find that the Roman (Ptolemaic or Attic) stadium matches almost exactly the distances stated by Strabo with some places he mentioned in the selected text of his book. The Roman stadium corresponds to 0.185 kilometre (1/8 Roman mile, 240 steps, 600 feet). Hence, for this article, I consider that Moron must be situated 93 kilometres (500 stadia) from the sea and that the island down from it is 5.5 kilometres (30 stadia) long. As the measurements mentioned by Strabo start from the sea, we will now have to find where the mouth of the Tagus used to be.

The mouth of the Tagus. Strabo mentions that the river Tagus has two estuaries. Looking at the place, the lower one is the Mar de Palha, the lake connected to the sea in Figure 1. The upper estuary is upstream from where the Tagus flows into the Mar de Palha. As he measures 500 stadia "from the sea", he is writing about the lower estuary. Where precisely would the mouth of the Tagus River be at its lower estuary? We must

reason like the ancient trade ship captain, who wrote the lost portolan and who, in his cabotage travel went up and down the Lusitanian coast and sailed upstream along its major rivers to do his trades. Seems evident to me he would find the points of inflection of the coast (the Tagus Mouth Line - TML), at the imaginary 5.9 kilometre-long line between Praia da Torre and Cova do Vapôr. There, any navigator going along the Portuguese coast notices clearly that his ship is leaving the sea and entering the Tagus River. However, Strabo informs us, that the mouth is 3.7 kilometres wide (20 stadia), which is 2.2 kilometres less than the actual distance at the TML (5.9 kilometres). The Tagus mouth is large and funnels itself upstream until reaching the river channel at the Torre de Belem. Even if we move the TML upstream until its width reaches the 3.7 kilometre distance mentioned by Strabo, this will reduce by only around 2 kilometres, as seen in our distance calculations upstream, starting from the Tagus mouth (Figure 2).



Figure 1. The Tagus lower and upper estuary after Strabo and the Tagus great valley plain (lezíria)

(Source: ESRI Deutschland)



Figure 2. The Tagus Mouth Line (TML): from Praia da Torre to Praia da Cova Do Vapor and the estimated place of the Tagus mouth line according to the distance mentioned by Strabo in his book Geografika (*Source: Google Maps*)

How precise are the measurements taken by the ancient trade ship captain? Strabo mentions that the fields above the mouth of the Tagus waterway are floodable up to a distance of 150 stadia (28 kilometres). But this flooded area (the Mar de Palha) at present goes upstream to Póvoa de Santa Iria, 33 kilometres from the TML. There is a mismatch of 5 kilometres between Strabo's information and the present distance. Again, this will not impact in the propositions of this article, as we will soon see. When using the Roman stadium in the selected text from Strabo, it seems that the navigator who wrote the portolan chart was fairly accurate, when we consider he took the measurements more than 2,000 years ago and some topographical features could have changed since then. This kind of precision is to be expected from a trade ship captain. Significant errors in his calculations could mean him getting lost, shipwrecking his ship, causing costly delays and risking losing valuable cargo. As in all businesses, time is money, and a precise portolan chart would have saved valuable time for him and any trade ship captain making use of such a document.

Mōron, suggested locations. The problem is that nobody seems to agree on that. The suggestions for the place where Mōron is situated are many, and I will list only five of them.

- 1. Mōron would be the city of **Almeirim** (Alentejo) by the river Tagus. The "Mōron is Almeirim" proposition was widely promoted in the first half of the 1800's [Grenet, P. (1781)], [Aynès, F.D. (1804)], [Langlois, H. (1830)], [Arrowsmith, A. (1832)]. No wonder Hamilton & Falconer (1877) and Horace L. Jones (1923) indicate in their respective Geografika translations into English that Mōron would be the present-day city "Al-Merim".
- 2. Mōron could be at **Chōes de Alpompé** (Vale da Figueira, Santarém) or **Santarém**, [Kalb, P. and Hock, M. (1988)].
- 3. Mōron would be at **Chōes de Alpompé**, at the Vale da Figueira, proposes Deserto [Deserto et al.(2017), p.112].
- 4. Mōron is the place of **Chã de Marcos**, in front of the island of Almourol (Tancos) [Schulten, A. (1928-1933)].
- 5. Mōron was the Alcáçova quarter of **Santarém** [Mantas, V.G. (1996)] [Mendes Correa, A.A. (1934)].

When we take the measurements as they are set out in the Strabo text, presuming they are fairly precise, the findings are enticing as we shall see now.

Where Strabo places Mōron. The Tagus waterway at present is not the same as it was 2,000 years ago. There were human interventions and one of the most significant among them was carried out in the 15th Century, when around 30,000 workers moved the Tagus waterway by way of excavations. Since this intervention, the Tagus no longer flows by the town of Carregueira, which is on its left bank, but passes by the town of Vila Nova da Barquinha, situated on its right bank. As far as I could find in my research, this intervention and most, if not all, other significant human interventions were made upstream from the 500 stadia point in the Tagus River. They would not have impacted on the distance measurements I did covering the stretch going downstream from the 500 stadia point, which matched those from [Mendes Correa, A.A. (1934)]. I measured the

distances as if navigating through the present waterway of this river, using Google Maps and its tools. We board our imaginary trade ship and navigate upstream until reaching the 500 stadia point from the Tagus Mouth Line (TML). I will call it the Red Point. We anchor our trade ship, look around, and here is what we can see at present (Figure 3):

- We are in the middle of the vast Tagus River plain, the *lezírias* (floodable
- The riverbed at 500 stadia from TML is at approx. 5 metres above the sea level (masl).
- To our left we see on top of a mount the town of Santarém. The Romans called it Scalabis.
- On our right, we see two towns situated on the top of low elevations in the plain: Almeirim, which is in front of Santarém and eight kilometres north there is Alpiarça.
- We notice that the Roman ruins of Santarém situated at the Avenida 5 de Outubro (the Green Point) are only 1 kilometre away from the 500 stadia from TML (the Red Point).

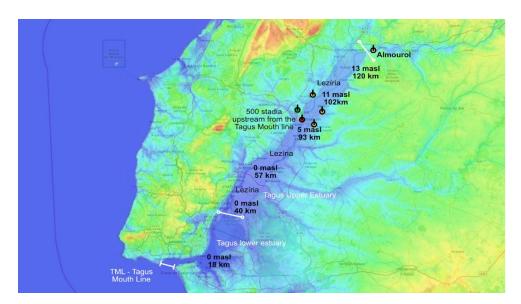


Figure 3. The Tagus floodplain (lezíria) map, with markings of the Tagus riverbed altitude per kilometre from the Tagus Mouth line and annotations on the lower and upper Tagus floodplain (estuary). Strabo mentions that Moron is in the upper Tagus estuary. The red dot is the mark for 500 stadia from the Tagus Mouth line (the Red Point). The green dot is Santarém, while the four yellow dots are where the other sources suggest Moron could be. My measurements were made independent from and confirm those from [Mendes Correa, A.A. (1934), p.253)]

(Source: ESRI Deutschland)

In the English translation by Hamilton, it seems like what I call the Island of Moron is formed only during the floods, while the Latin translation from Müllero does not have the Latin word "formed" in it, meaning that the island could be perennial at that time:

"In the upper estuary an island is formed about 30 stadia in length" [Hamilton, H.C. and Falconer W. (1903), v.1, p.227-228] "In superiore effusione antem insula quoque includatur longitudine triginta stadiorum..." [Müllero, C. and Dübnero, F. (1853), v.1,

p.125].

"In superiore effusione antem insula quoque includatur longitudine triginta stadiorum..." [Müllero, C. and Dübnero, F. (1853), v.1, p.125]

Kalb and Höck detected this mistake in the translation from Greek into Latin: "it is not how Schulten and others translated, that there is an island in the river, but that when there are floods, they form and island" [Kalb, P. and Hock, M. (1988), p.196]. Therefore, the English translation by Hamilton and Falconer is correct in this part of the text. The next step is to examine closely the already mentioned five alternatives that point to where the oppidum of Mōron was located. For this purpose, I drafted a map, see Figure 4, marking each one of the four suggested alternatives mentioned before. I traced a 10-kilometer circle from the Red Point (500 stadia from TML), to make up for any errors in the measurements listed by Strabo. This circle covers four of the five proposed places for Mōron, as previously mentioned in this article. The exception is Almourol, which is 718 stadia (133 kilometres) upstream from TML.



Figure 4. The 500 stadia place from the Tagus Mouth line (*Source: Google Maps*)

- The Red Point marks 500 stadia upstream from the Tagus Mouth Line (TML), which we place at the line of Praia da Torre to Praia da Cova do Vapor.
- The Green Point is the place of the Roman ruins at Santarém (Avenida 5 de Outubro). The Roman ruins are just 1 kilometre as the crow flies from the Red Point.
- The Yellow Points are the places where the sources place Mōron: Alto do Castelo (Alpiarça), Almeirim, Chões de Alpompé. Santarém is also a

possibility.

• The island of Almourol is 43 kilometres upstream from the 500 stadia Red Point, hence it is outside this close-up map.

Etymologies for Mōron. Here again, nobody knows for sure. We have a couple of hypotheses. In one of his articles, Alarcão tries to find the etymology of the toponym Val de Mourom or Val de Moraão, situated in Assacaias (10 masl), which is a low flatland at the banks of the Ribeiro de Cabanas, around 1.4 kilometres to the south of the Alcáçova of Santarém (110 masl) [Alarcão, J. (2009), p.38]. He did not reach any conclusion, but thinks it originates from an indigenous (native) ethym.

Excavations by Arruda found a strong influence of Phoenician pottery in that region marked by the circle on the map [Arruda, A.M. (2009), p.29-35]. This led some to think that Phoenician cultural influence was so strong that perhaps Mōron gained its etymology from a Phoenician word. Regardless as to whether the Phoenicians themselves built colonies there since around 800AC or their traders brought new pottery technologies and influenced the local architecture [Arruda, A.M. (2009), p.29-35], these exogen populations were not a majority in that region. Population estimates suggest that in the beginning of the Christian Era, Celtic peoples were around 40% to 50% of the population of the Western (Latin) Roman Empire, which at that time had around 34 million inhabitants [Frier, B.W. (2000), p.812, 814]. Around 12-16 million Celts or Celticized peoples lived up north of the Marecchia river (Rimini) up to Alpine Italy, plus the Gaul, central and northern Hispania, Gallaecia, north and parts of central Lusitania and southern England.

It follows that any eventual Phoenician trade and manufacturing settlements in central Lusitania would be a drop in this Celtic ocean. A Phoenician etymology for Mōron could exist, but is not likely. Phoenician settlers, if any, probably lived and worked in their villages or quarters doing their international and local trade activities, but the great majority of the population was non-Phoenician. They were Celtic, perhaps mixing with Iberian. It is still unclear who the Lusitanian ethnics were, but they were not Phoenicians. We see this same pattern when studying the islamisation of Buddhist Indonesia. Islam went there through Arab merchants, who lived in their quarters close to the seaports and kept their business going through sea trade with their Arabic counterparts outside Indonesia. Eventually, most of Indonesia was islamized. The Arabic culture impacted the in the process. But the ethnic Arabs always remained a minority, and any Indonesian toponyms are mostly from the native languages spoken there.

Following this line of reasoning, instead of outsourcing the toponym Mōron to the Roman and North African anthroponym Mauro or to the Phoenician language or other foreign sources, I will research an *in-house* etymological solution. By in-house, I mean a toponym that could be explained by the language spoken in the region 2,000 years ago. That language was Lusitanian, spoken by the Lysis, the people that most probably inhabited the banks of the Tagus River from its mouth to the lands up to Mōron and perhaps further upstream. The Lysis lived in the borderlands between the Celtic north and the Iberian south.

There is debate as to whether the Lusitanian language was a Celtic language or not. We know for sure that the few Lusitanian inscriptions that survived time show a strong influence from the Celtic language and an equally important presence of pre-Celtic words. We also know that the Celtic peoples preferred to denominate toponymy according to the physical characteristics of the landscape, although there were exceptions. Lugdunum (Lyon, France) and others. According to the description by Strabo, we should be looking for a place that had a town situated on top of a mount close to the Tagus River and a river island down from the town. Let's suppose the toponym Mōron means mount because that is its most significant characteristic. It could derive from a radical mor-. However, is mor-, meaning mount, a Celtic word? It is not. The Celtic radical mor- exists but it means sea, lake. The Proto-Celtic and Celtic language roots for the word mount (a high hill) are: *bando (peak, top) [Matasovic, R. (2009), p.54], *fales (rock, stone, falesia) cognate to Proto-Germanic *feleza [Matasovic, R. (2009), p.120], *garth (Medieval Welsh) means hill [Matasovic, R. (2009), p.164-165], *moniyo (mountain) [Matasovic, R. (2009), p.277], *slebos (mountain, slope) [Matasovic, R. (2009), p.346-347].

None of them bear the radical *mor*- meaning *mount*, which seems to be part of the toponym Mōron. This could mean that the radical *mor*- from Mōron is pre-Celtic. This very ancient pre-Celtic radical *mor*- probably changed into the modern Portuguese *morro* ($m\bar{o}rro$), possibly cognate with Basque murru (hill). Morro means a mount, the top of which is rounded or flat. A *morro* is not a tor(r), this other pre-Celtic word meaning *sharp peak* [Galmés de Fuentes, A. (1983)] [Tempan, P. (2022)]. From this other very ancient radical tor(r) came words like tower (torre). A mor(r)- has a rounded or flat top. Sometimes, the flat top of a $m\bar{o}rro$ is wide enough to allow the building of a couple of houses or even larger settlements on it. This was the case of Mōron. The town of Mōron is on top of a mount, Strabo says, and κατά (below, down from) it there was the island that "has *beautiful groves* and *fine* vines" (εσαλσές καὶ εσάμπελον).

The reader may forgive me if I now present an extensive toponym list. The aim of this is to show that this radical mor(r)- was widely used to denominate toponyms in most historic Celtic lands from Switzerland down to the Iberian Peninsula. There are size variations for mor(r)-: Moronville (136 masl, Courbehaye, France) is situated at the top of a low elevation in relation to its surroundings. At the other end, in terms of height, we have Mount Mōron in French Switzerland (1,337 masl). What are the similarities between these two elevations of such different heights? In both cases, they have a rounded top.

Most of the Iberian toponymy bearing the radical mor(r) is up to 800 masl, all have a rounded top: Mōron de la Frontera (Seville) is at 297 masl. In Galicia, the place of Morono (Herbón, Sar) is a village on the slope of a 98 masl hill near the river Ulla (12masl); still in the valley of the river Ulla, there is Mount Mourozos (300masl, A Carballiña, Padrón). In Catalonia, the Morro de l'Abella (670 masl, Tavertet, Barcelona). And the list goes on: In Burgos, the Morro de Laguillo (Quiconces de Yuso). In the Basque Country, the Morro de la Peña (757 masl, Ozaeta, Vitoria-Gasteiz). In Badajoz, Morro de Aguas Santas (Puerto Hurraco), Morro de la Zauceda (739masl, Badajoz), and El Morro (500masl, Oliva de Merida, Badajoz). In Salamanca, Moronal (Villariño de los Aires). There are the toponyms Moronda (Caspueña,

Guadalajara) and Barranco Moronda (Torla Ordesa, Huesca). The cities of El Morrón (Villena, Alicante), El Morro (Cuevas del Almanzora, Almería and Navas del Rey, Madrid) are on the top of a mor(r)- or close to one.

In the Balearic Islands, the radical mor means mounds of stones, mainly referring to megalithic constructions, while morr means mount [Galmés de Fuentes, A. (1983)]. In Italian, depending on the regional dialect, marra is a pile of stones, maregna is metal slag, and morra means sharp rock, while mora is a pile of stones. In the Piedmont dialect, marògna is moraine (heap of stones formed by a glacier). In Castilian, morrena (in Portuguese morena) are the gravel piles formed by the glaciers. In the Bearnese dialect (Pyrenees), marralhère is a mountain slope covered with stones and rocks. Mōron (and morro) in Castilian means a small hill. The great majority of these toponyms indicate elevations (hills, mounts, mountains) with rounded tops, the mor(r). This sustains my suggestion that the ethym Mōron from Strabo means a hill with a rounded top.

Analysing each suggested place for Mōron. As mentioned before, Philine Kalb and Martin Hock did a detailed critical review of each proposed place for Mōron [Kalb, P. and Hock, M. (1988)]. We have set a feasible etymology for Mōron (hill with a rounded top, morro). Now, we will do a review based on the topography, taking into account that the etymology of Mōron could be morro. Let's analyse the five alternatives for the place where Mōron is, applying our etymologic and topographic findings on each one of them. Four of them are close to the Red Point that marks 500 stadia from the sea. The fifth, the island of Almourol, is far from the Red Point at 43 kilometres upstream of the Tagus. Please be aware that at the Red Point, the riverbed of the Tagus is currently around 5 masl.

- 1. **Almeirim:** Hamilton & Falconer (1877) and Horace Jones (1923) indicate that Almeirim (which they link to an imagined Arabic toponym Al-Merim) is Mōron. Not much archaeological work was done in Almeirim, but Roman artefacts were found at the place named Alto dos Cacos. The town of Almeirim is situated on a gentle elevation 22-25 masl on the lezíria, in the vast plain on the left bank of the river Tagus. In its immediate surroundings, towards the Tagus waterway, the height drops rapidly to 9 masl. However, on the other side of the town facing the Tagus River, the height goes up to 30 masl joining with the slopes of the river valley. This means that Almeirim never becomes an island, even during the mostly biannual Tagus flood season (December to March). Also, Almeirim is so gentle an elevation in that vast plain, that I cannot see any other elevation close to it that could be a potential candidate to be the actual island κατά (below, down from) it. Strabo said Mōron was on the top of a mount. Almeirim is not on the top of a mount, not even a significant hill. Therefore, Almeirim is not Mōron.
- 2. Alto do Castelo (Alpiarça): Eight kilometres north of Almeirim, on this same plain on the left bank of the Tagus River, is the city of Alpiarça and the place of Alto do Castelo. Archaeological excavations led by P. Kalb and M. Höck between 1982-1988 found the remains of a big Roman fort in Alto do Castelo, in the southern area of Alpiarça. This fort would have been built on top of

another smaller fort from the Bronze Age. The walls of the Roman fort surround all 28 hectares of the elevation it is placed on. Kalb and Höck conclude that the city of Mōron mentioned by Strabo would be at either Santarém or Chões de Alpompé, but not at the Alto do Castelo, in Alpiarça [Kalb, P. and Hock, M. (1988), p.192]. Like Almeirim, Alpiarça is placed on a gentle elevation with around 28 hectares at 23 masl at their highest. However, the Alto do Castelo is as low as Almeirim and its slopes are also very gentle. Alto do Castelo is not a Mōron (morro, mount with a rounded or flat top) by any means.

- 3. Chões de Alpompé (Vale da Figueira, Santarém). we Cross the Tagus to its right bank. The most recent Portuguese translation of Geografika [Deserto et al.(2017)] was based on Stefan Radt's 2003 Greek version. They also consulted Hamilton and Falconer (1854) and F. Laserre (Coleção Budé). The problem with Hamilton & Falconer is its several translation missteps, as we saw previously in this article. If the selected text analysed in this article was not very well translated, we can imagine there could be more mistakes in the rest of the translation. As mentioned before, these mistakes propagated, and the Portuguese version was impacted by them. Deserto proposes that Moron is the archaeological site of Chões de Alpompré [Deserto et al.(2017), v.3, p.112], which would be Chões de Alpompé (Vale de Figueira), about 8 kilometres north of Santarém. Chões de Alpompé is a 96 masl elevation facing the mouth of the Avila River where it flows into the Tagus. Chões de Alpompé is high enough and looks like a mount with a rounded top (morro). It looks more promising than Almeirim and Alto do Castelo (Alpiarca). However, Chões is 2 kilometres away from the Tagus [Kalb, P. and Hock, M. (1988), p.199]. There is no 5.5 kilometres (30 stadia) topographical relief in the Tagus floodplain κατά (below, down from) Chões de Alpompé that could have been the island mentioned by Strabo. Why would the portolan, drafted by a captain of a trading ship, mention it? It was economically irrelevant and far away from the Tagus waterway. For this reason, I disagree with [Kalb, P. and Hock, M. (1988), p.192], who think Chões de Alpompé could possibly be Mōron.
- 4. **Chā de Marcos.** this place is in front of the Island of Almourol. In this island, there is a beautifully preserved Templar castle, which protects the entry of the valley of the Tagus. Almourol is not far from the end of the great Tagus lezíria, which is a great floodplain that stretches 114 kilometres from the Tagus Mouth (Lisbon) to Entroncamento (Golegã). From Entroncamento upstream, the Tagus runs not through a plain (lezíria), but into a steep valley that cuts through rugged land. Archaeological excavations in Almourol found objects from Roman times, and Arab-style ceramics from the 7th century [Gandra, M.J. (2018)]. In 1129, Almourol Island was conquered by Christian troops. In 1169, the Portuguese king Afonso Henriques authorised the Templars to build several castles in this region bordering the then Muslim-held territories. In 1170-71, the master of the Order of the Templars, Gualdim Paes, started the construction of the Almourol Castle on the ruins that existed of a Roman castle on the island. The problem with this hypothesis by Schulten [Schulten, A. (1928-1933)], is that the island of Almourol is a rocky place. It is small (403 meters length and

110 meters width). It cannot host beautiful woods and fine vines. It is low, at 27 masl, while the Tagus riverbed there is 13 masl. It is 718 stadia upstream from the sea, far from the 500-stadia-upstream point mentioned by Strabo. It was economically unimportant. When we look $\kappa\alpha\tau\dot{\alpha}$ (below, down from) Chã Marcos, we effectively see the Island of Almourol, but due to the island size, height, and rocky terrain, I cannot see why Almourol would be the island Mōron, which had "many woods and fine vines".

5. Santarém. Mantas, Mendes Correa, Kalb and Höck believe that Santarém is Moron, but could not set the basis for confirming this [Mantas, V.G. (1996)] [Kalb, P. and Hock, M. (1988), p.192]. This city is on top of a couple of hills with rounded tops (morros) and its highest quarter is at 113 masl, while the lower part is at the banks of the Tagus River, close to 5 masl. In Roman times, Santarém was a town with commercial significance. In fact, at that time, Santarém was more important than Olisipo (Lisbon). Lisbon was fortified by the Romans to protect Santarém, according to Pliny the Elder. Santarém was connected through roads to Conimbriga to the north, and from there, to Bracara Augusta, linking Lusitania with Gallaecia. To the east, Santarém was connected to Emerita (Mérida) in Hispania. To the south with Olisipo (Lisbon) and from there, farther south to Ossonoba (Faro, Portugal), a port close to the big Roman (and pre-Roman) trade hub at Cádiz. No long-course trade ship captain in his right mind would bypass such an important port as Santarém to dock on any lesser port in that region. He would certainly mention Santarém in his portolan chart. Furthermore, when we look again at the etymology of the toponym Mōron, Santarém is known as the City of the Seven Hills. Santarém is on top of a *mōrro* like Strabo says. Santarém is the major elevation in several kilometres around it and is close to the Tagus banks (Figure 5). Santarém matches with the description by Strabo. Santarém most probably is Mōron.

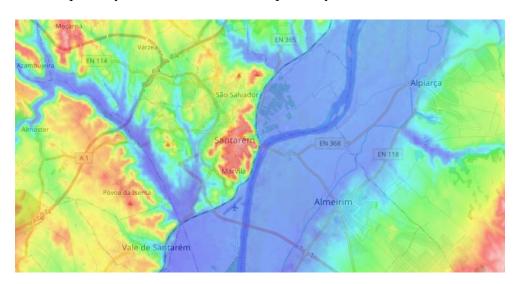


Figure 5. The seven hills of Santarém are in a plain of the Tagus river valley (Source: ESRI Deutschland)

The island κατά (below, down from) Mōron. We are at Santarém's ancient Alcáçova quarter celebrating the confirmation of what Mantas and Mendes Correa suggested and

Kalb and Höck guessed. Santarém is Mōron. The Alcáçova sits at 110 masl on top of one of the seven Mōron where the city is. The view from there is beautiful. Then, we look down and our happiness wanes. Down there ($\kappa\alpha\tau\dot{\alpha}$) in the vast floodable plain, we cannot see any island that measures 30 stadia in length (5.5 kilometres) and almost that in width. All we can see are the gentle elevations with the towns of Almeirim and Alpiarça on top, on the opposite Tagus bank from Santarém. But we have seen that Almeirim and Alpiarça could not have been islands. Neither of them are the Island of Mōron was mentioned by Strabo in his book Geografika 2,000 years ago. If Santarém has no island $\kappa\alpha\tau\dot{\alpha}$ (below, down from) it, then Santarém was not Mōron.

Seems like we are back to scratch in this article. However, I believe Mōron is Santarém and that the portolan that described the island was fairly precise. To find out where the Island of Mōron was, I invite the reader to first look at the town of Almeirim. The following map from Almeirim created by Júlio Luis Guerra, a colonel of the Portuguese army, dates from 1855 (Figure 6). In it, we see a creek named Vale de Peixe (1) that fed a small lagoon, called Pêgo do Conde de Taipa (2). Connected to it was a reed marsh (juncal). This lagoon could be accessed through the Rua da Alagoa (former Rua da Lagoa, Street of the Lagoon) (3). The Count of Taipa, Gastão da Câmara Pereira Coutinho de Sande, who was born in 1794, moved to Brazil with the royal court in 1807, to escape the invading armies of Napoleon. He returned to Portugal in 1821 and became an entrepreneur in the Almeirim and region.

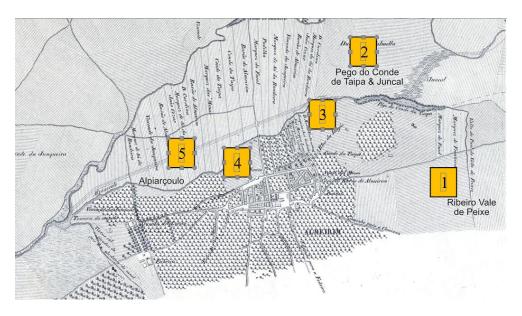


Figure 6. Map of the River Tagus from Mouchão dos Coelhos to Dique de Vallada, by Colonel José Julio Guerra, 1855. *Source: thank you to Mr. Eurico Henriques, Almeirim City Hall.* On this map, we see (1) the Ribeiro Vale de Peixe that discharged its waters into the Pêgo do Conde de Taipa, which is the (2) Lagoon of Almeirim. The Rua da Lagoa (3) gave access to the lagoon. There is also the old course of the Alpiarçoulo Ditch (4), which drained the Lagoon of Almeirim, and its planned rectified course (5)

Long before the Count of Taipa, the Portuguese king John the 1st demarcated the Coutada de Almeirim as his hunting reserve on the 18th August 1424. He listed the hunting reserve landmarks being one of them "na valla do Paaço de Almeyrim...", that is, "at the ditch of the Almeirim Palace". Four hundred years later, the Count of Taipa invested from his funds to

improve the draining flow of the Alpiarçoulo Ditch (4) that passes by Almeirim. He rectified its course (5). For centuries, those ditches drained the Almeirim Lagoon that existed close to that town as we see on the previous map. By 1855, there was only the small Count of Tapias marsh left. When I checked the topography around the Lagoon of Almeirim, it seemed evident to me that in ancient times, this lagoon could have encircled almost half of the low elevation where the town of Almeirim sits today. Furthermore, according to the local topography, this lagoon seems to me to be part of an ancient arm of the river Tagus. This old Tagus arm, now dry, with the existing Tagus arm, would create an island.

It is true that Kalb and Höck suspected that one of the mouchões (river islands) in face of Chões de Alpompé, Santarém, or the Mouchão do Inglês (Alpiarça) [Kalb, P. and Hock, M. (1988), p.199] was the island mentioned by Strabo. But they did not find it precisely. Here we have the map of this hypothetical island (Figure 7). It is κατά (below, down from) the town of Mōron (Santarém). According to the topography of the place, this island could be around 5.4 kilometres long and around 2.5 kilometres wide from Santarém to the border of the Almeirim lagoon. This simulation supposes that the lagoon water level was at 7 metres above sea level (masl), while its surrounding area in dark blue is from 9 to 12-14 masl.

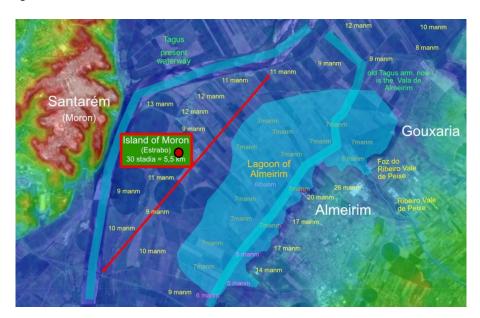


Figure 7. Map of the Almeirim Lagoon, the Ribeiro (Creek) Vale de Peixe and the possible 30 stadia island (5.5 kilometres) κατά (below, down from) Santarém, as mentioned by Strabo in his book Geografika.

(Source: ESRI Deutschland)

The present ditch that passes by Almeirim (Vala Real or Vala de Alpiarça) flows in part into the old Tagus arm bed to the right in lighter blue colour. The Lagoon of Almeirim area is marked in light blue. This simulation is based on the present topography. It is an estimation. In loco topography and geology studies could result in a more precise map.

I believe my hypothesis about the Lagoon of Almeirim connected to the old Tagus arm holds some water (pun intended), because there is information to show that this old Tagus arm close to Almeirim existed and fell victim to human intervention in historical times. In 1936, Leite de Vasconcelos found out a rocky place close to Almeirim. Locals told him that those stones blocked a Tagus arm. They called that place the Old Tagus. Leite de Vasconcelos speculates that this could perhaps be a work ordered by king John

V (1689-1750) [Leite de Vasconcelos, J. (1936), p.25]. This Old Tagus arm is probably the same I suggest on the map. Before human intervention, these draining ditches were most probably yazoo streams, characteristic of flat and large river valleys such as the Tagus. There was so much water left from the floods and from the small creeks running down the slopes of the Tagus valley that although the Lagoon of Almeirim was being drained day in, day out, for centuries, at least since 1424, it still existed at least until 1855. This is a proven lifetime of at least 431 years. Certainly, the lagoon is much older. Some of those river islands, the *mouchões*, used to move, be built and destroyed by the Tagus floods. But the bigger islands resisted the floods for a long time. This was the case with the Island of Mōron.

Tapada (Alpiarça): in Figure 8, we see at present the settlement of Tapada (Almeirim), which is at the highest ground of the place that I believe to be the Island of Mōron.

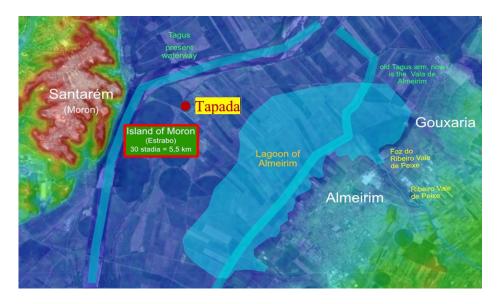


Figure 8. The suggested Island of Mōron and the present-day Tapada settlement. Tapada has two restaurants, one school, a chapel, and several houses. The Tagus floods reach Tapada every 10-20 years. If there were no major topography changes in the last 2,000 years, the Island of Mōron was high enough to be a perennial island.



Figure 9. A street at Tapada (Almeirim), settlement that sits at the highest point of the proposed Island of Mōron (*Source: Google Maps*)

We have seen that Strabo mentioned that the island $\kappa\alpha\tau\dot{\alpha}$ (below, down from) the town of Mōron (Santarém) had *beautiful groves and fine vines*. The last flood that reached the outskirts of the Tapada settlement was in 2012. Almost no groves are left on the island, but there are several vineyards. They cover a significant part of the Tapada neighbourhood and survived the big flood of 2012 and others before it. Very close to the Tapada settlement, there is the Quinta da Gafaria, from the 17^{th} Century. Along the last 400 years, its buildings survived infrequent flooding. The place is now a beautiful and cosy family-owned 3-star hotel and functions without any issues caused by the Tagus flooding. In the place is now a securificant part of the town of the tow



Figure 10. The Quinta da Gafaria (Tapada) is a hostel that runs without issues from the annual Tagus floods (Source: Google Maps)

Like all other rivers, the Tagus suffers from silting and erosion. For this reason, its riverbed in the present may be higher than it was 2,000 years ago. The flow capacity of its riverbed would have been higher than at present, resulting in less water overflowing to the plains. In ancient times, the former island encircled by the two Tagus arms could thus escape better from the average size floods.

The Roman fort at Alto do Castelo and its economic significance: this old arm of the Tagus close to Almeirim, which forms the suggested Island of Mōron, gives a whole new meaning to the Roman fort situated at Alto do Castelo (Alpiarça). We have seen that this Roman fort had around 28 hectares [Arruda, A.M. et al. (2014)]. It was big. If it was big, it means it would have guarded something significant. Perhaps it hosted the Roman legions led by Junius Brutus, who waged war against the Lusitanians. The fort may also have guarded the Old Tagus waterway close to Almeirim against incursions by invaders, raiders, and pirates.

While the fort at Alto do Castelo guarded the now dry left arm of the Tagus that passed by Almeirim, Mōron (Santarém) guarded the right Tagus arm. These two Roman forts blocked any enemy incursion in the upper part of the Tagus lezíria (floodplain). If this is true, the Old Tagus channel that passed close to Almeirim in my map should have its course altered accordingly because, most probably, it was closer to the Roman fort

¹ Thank you to the Quinta da Gafaria's owner for the information.

2,000 years ago.

Mōron, an important logistic hub: the economic significance of Santarém in ancient times is proposed by several researchers. According to Strabo, the Tagus was navigable by large seaworthy ships up to Mōron, but goods must be carried upstream from there by smaller river ships.

"The country surrounding it [n.a. Mōron] is very fine, and the ascent [of the Tagus] for a considerable way practicable for vessels of a large size, the remainder is performed in riverboats. Above Mōron, it is navigable for a yet longer distance." [Hamilton, H.C. and Falconer W. (1903), v.1, p.227-228]

This reminds me of a similar logistic hub situated at the mouth of the Escaut (Scheldt) river in the Netherlands. The long-course ships disembarked their goods at the port situated at its mouth. From there, a fleet of smaller river ships carried the goods upstream through a network of canals that interconnected lagoons and marshes abounding in that river. These retailers purchased the goods at the river mouth port and resold them at several smaller river ports upstream. If this is also true for the Tagus, and I believe what Strabo writes is true, we would have a similar logistics hub at Mōron (Santarém). From there, numerous traders took the goods upstream (and downstream) to the small ports the big ships could not reach, or which were not significant enough for a bigger ship to stop and trade to. Also, several roads connected to Santarém-Mōron facilitated the transportation of goods into areas far from the Tagus River. But why would the Romans need to guard that region? Because it was wealthy and produced important quantities of tradeable products. Strabo mentions that the Romans built military fortifications at Olisipo (Lisbon) at the mouth of the Tagus to keep ship transit unimpeded. Mōron (Santarém) and Olisipo (Lisbon) were the finest cities in that region, he says [Hamilton, H.C. and Falconer W. (1903), v.1, p.228]. From there, there was a valuable trade going up and down the Tagus and it must be protected (and taxed).

Santarém, the Paradise of Delight: Strabo mentions that "the Tagus abounds in fish and is full of oysters" and "the country round about the city (n.a. of Mōron is) rich...so that among the cities about the Tagus, these are the strongest" meaning Olisipo (Lisbon) and Mōron (Santarém). An anonymous author from the 12th Century stated that the region of Santarém was a "paradise of delight" [Custodio, J. (2009), p.19]. Deforestation started in earnest in the Bronze Age. Olives were brought around the 8th-Century BC and vines a bit later, according to palynology research [Azevedo, T.M. et al. (2019)].

"The Tagus was until the early 19th Century, a multi-channel fluvial system that separated sandy patches of land" [Azevedo, T.M. et al. (2019), p.189)]. This region had a lush vegetation (beautiful woods)and wildlife. Several Tagus River waterways crossing the flat river valley κατά (down from) Mōron (Santarém) certainly held much fish. The Lagoon of Almeirim was an important part in that ecosystem, the perfect nursery for all kinds of fish and crustaceans. This network of channels and lagoons encircling the big mouchões (river islands), among them the Island of Mōron, were bordered by lush vegetation. The Tagus was already a low-energy river, and several channels reduced the speed of water in the vast lezíria plain, facilitated soil water

retention, feeding the water table and enriching the terrains with organic matter. That is why the Romans invested efforts and funds to protect the Tagus valley plain and ensure they controlled and taxed the trade. No wonder 1,400 years later John the 1st, the king of Portugal, established his royal hunting grounds at Almeirim on the opposite bank of the Tagus from Santarém, and built his palace there. He wanted to enjoy that "Paradise of Delights".

As in many countries, the royal hunting grounds could not suffer any kind of intervention from the neighbouring population. There could be no deforestation, no hunting, and no fishing, except for the king or when authorised by him. This helped preserve the environment for a couple of centuries, but later Portuguese kings abandoned the place and after 1831, it was nationalised and what rested of the native forests was cut. Drainage works of the valley had started before the Romans, but they did it in a more systematic way [Azevedo, T.M. et al. (2019)]. Later intensive drainage works and the big Tagus waterway contention works in 1836 by the Portuguese army colonel José Julio Guerra ensured the continuing navigability of the Tagus in a time when river water levels were going down. However, these works destroyed the multichannel ecologic system. What had been a region lush with groves, cultivated plots, game, and river channels rich in fish and crustaceans became the mostly boring agricultural landscape we see at present.

4. CONCLUSIONS

I strived to reconstitute the whole scenario, which was in part described by Strabo, basing myself more closely on consistent information and other historical sources further to the book Geografika. Concerning the text I selected from Strabo and its translation into English by Hamilton, here is the version as it is in his book:

"At the flood-tide, the Tagus forms two estuaries in the plains that lie above it, so that the plain is inundated and rendered navigable for a distance of 150 stadia. In the upper estuary, an island **is formed** about 30 stadia in length, and nearly equal in breadth, which **is fertile, and has excellent vines**. The island lies **near Mōro**, a city **happily situated** on a mountain close to the river, and about 500 stadia from the sea. The country surrounding it is very fine, and the ascent [of the Tagus] for a considerable way practicable for vessels of a large size, the remainder is performed in riverboats. Above Moro, it is navigable for a yet longer distance." [Hamilton, H.C. and Falconer W. (1903), v.1, p.227-228]

...and here we have it with my suggested corrections:

"At the flood-tide, the Tagus forms two estuaries in the plains that lie above it, so that the plain is inundated and rendered navigable for a distance of 150 stadia. In the upper estuary, an island is formed about 30 stadia in length, and nearly equal in breadth, which has beautiful woods and fine vines. The island lies down from Mōron, a city well situated on a mountain close to the river, and about 500 stadia from the sea. The country surrounding it is very fine, and the ascent [of the Tagus] for a considerable way practicable for vessels of a large size, the remainder is performed in riverboats. Above Mōron, it is navigable for a yet

longer distance."

What I call the Island of Mōron, the island mentioned by Strabo, was there all the time. It was prope (near, by, close to) Santarém-Mōron. But most importantly, it was not opposite, it was κατά (down, down from) Santarém-Mōron. It might have had beautiful woods and fine vines, and indeed the extensive vineyards it has at present. The Latin translation by Müllero (1853) did not take into account the most frequently used meaning of the word κατά (below, down from) and translated it into prope (near, by, close to, opposite). Hamilton and several other researchers followed suit. Kalb and Höck could not make up their minds between Chões de Alpompé and Santarém, imagining the Mouxão dos Ingleses was the island from Strabo. I believe that Santarem is without too many doubts Moron and the island is not the Mouxão dos Ingleses but the other mouxão situated down from Santarém (Figure 7). Vasco Mantas [Mantas, V.G. (1996), p.555-556] and Mendes Correa [Mendes Correa, A.A. (1934)] were right when proposing that Mōron was Santarém. The etymology of the toponym Val de Mourom or Val de Moraão, situated in Assacaias (10 masl), which Alarção could not find [Alarção, J. (2009), p.38], is now easily identifiable as Vale de Morrão (valley of the big hill), situated close to the morro (hill) where Mōron-Santarém sits.

REFERENCES

- **Adams, Douglas Q.** (2013). A Dictionary of Tocharian B revised and greatly enlarged, Rodopi, Amsterdam.
- **Arrowsmith, A.** (1832). A Grammar of Ancient Geography compiled for the use at the King's College School, London.
- **Arruda, A.M.** et al. (2014). *Alto do Castelo's Iron Age Occupation*, UNIARQ Centro de Arqueologia da Universidade de Lisboa, Faculdade de Letras, published by Universidade de Salamanca, 2014
- **Arruda, A.M.** (2009). A Alcaçova de Santarém e os fenícios no estuário do Tejo, in *De Scallabis a Santarém*, Museu Municipal de Santarém, Museu Nacional de Arqueologia, Lisboa.
- **Alarcão, J.** (2009). Scallabis e o seu território, in *De Scallabis a Santarém*, Museu Municipal de Santarém, Museu Nacional de Arqueologia, Lisboa.
- **Autenrieth, G.** (1904). A Homeric dictionary for schools and colleges.
- **Aynès, F.D.** (1804). *Nouveau dictionnaire universel de géographie ancienne*, Rusard et Cie., Lvon.
- **Azevedo, T.M. et al.** (2019). As cheias na construção e evolução da lezíria do Tejo, síntese de dois projetos, in *Água e Território, un tributo a Catarina Ramos*, Centro de Estudos Geográficos da Universidade de Lisboa.
- **Custodio, J.** (2009). O Tejo e Santarém, in *De Scallabis a Santarém*, Museu Municipal de Santarém, Museu Nacional de Arqueologia, Lisboa, quoting Quomodo sit capta sanctaren civitas a rege alfonso comitis henrici filí, a manuscript from the end of the 12th Century renamed as De expugnationis Scalabis by Alexandre Herculano.
- **Deserto et al.** (2017). *Estrabão, Geografia, v.III: Introdução*, Tradução do Grego e Notas, Imprensa da Universidade de Coimbra, 2016.
- **Frier, B.W.** (2000). The demography of the early Roman Empire, chapter 4a of book *The Cambridge Ancient History*, v.11, Cambridge University Press.
- **Galmés de Fuentes, A.** (1983). *Toponimia Balear y asociación etimológica*, Universidad de Oviedo, in Archivum; Vol 33.

- **Gandra, M.J.** (2018). *O Castelo de Almourol, Gualdim pais e a Cavalaria Espiritual*. Roteiro da exposição, Centro de Interpretação Templário de Almourol, Câmara Municipal de Vila Nova da Barquinha, Barquinha.
- Grenet, P. (1781). Abrégé de géographie ancienne et moderne, Paris.
- **Guerra, A. et al.** (2009). *De Scallabis a Santarém*, Museu Municipal de Santarém, Museu Nacional de Arqueologia, Lisboa.
- **Hamilton, H.C. and Falconer W.** (1903). *The Geography of Strabo*, Book III, Chapter III, Section 1. London, at
 - https://www.perseus.tufts.edu/hopper/text?doc=Perseus%3Atext%3A1999.01.0239%3Abook%3D3%3Achapter%3D3%3Asection%3D1
- Jones, H. L. (1923). The Geography of Strabo, Harvard University Press, London.
- **Kalb, P. and Hock, M.** (1988). Mōron, in *Conimbriga 27*, Coimbra, first published as Alto do Castelo, Alpiarça, Distrikt Santarém. Vorbericht über die Grabungen 1981, in Madrider Mitteilungen, 23, 1982 p.145-151.
- Langlois, H. (1830). Nouveau dictionnaire universel, usuel et complet, H. Langlois, Paris.
- Leite de Vasconcelos, J. (1936). Etnografia Portuguesa, v.1, Imprensa Nacional, Lisboa.
- **Liddel, H.G. and Scott, R.** (1901). A Greek-English Lexicon, American Book Company, New York.
- Mantas, G.V. (1996). A rede viária romana da faixa atlântica entre Lisboa e Braga, thesis, University of Coimbra quoted in De Scallabis a Santarém, Museu Municipal de Santarém, Museu Nacional de Arqueologia, Lisboa (2009), p.37, Scallabis e o seu território, Jorge de Alarcão.
- Matasovic, R. (2009). Etymological Dictionary of Proto-Celtic, Brill, Leiden, 2007. Meinecke, A. (1877). Strabonis Geographica recognovit Augustus Meinecke, Leipzig. Mendes Correa, A.A. (1934). Mōron, in Trabalhos de Antropologia e Etnologia, v.6, 1934.
- Müllero, C. and Dübnero, F. (1853). *Strabonis Geographica, graece cum versione reficta*. Editore Ambrosio Firmin Didot, Paris.
- Radt, S. (2003). Strabons Geographika, Brill Deutschland GmbH.
- Schulten, A. (1928-1933). Forschungen in Spanien 1928-1933, in Archäologischer Anzeiger, 1933.
- **Sturtevant, E.H.** (1927). Hittite katta(n) and related words, in The *American Journal of Philology*, v.48, nr. 3, p.247-257, Johns Hopkins University Press.
- **Tempan, P.** (2022). Ros, tor and tul: topographical survivors from pre-Celtic strata?, Queen"s University, Belfast.
- **Verkerk, P.** (2020). *Morphologia Graeca*, online at *https://morphologia_gr_en.en-academic.com/*