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MERSİN ÜNİVERSİTESİ KILIKIA ARKEOLOJİSİNİ ARAŞTIRMA MERKEZİ BİLİMSEL SÜRELİ YAYINI 'OLBA'

YAYIN İLKELERİ

Amaç

Olba süreli yayını; Anadolu, Akdeniz dünyası ve ilişkili bölgelere dair orijinal sonuçlar içeren Arkeolojik çalışmalara yer verir; 'Eski Çağ Bilimleri'ni birbirinden ayırmadan ve bir bütün olarak benimseyerek bilim dünyasına değerli çalışmalar sunmayı amaçlar.

Kapsam

Olba süreli yayını Mayıs ayında olmak üzere yılda bir kez basılır.

Yayınlanması istenilen makalelerin her yıl 31 Ağustos - 31 Ekim tarihleri arasında gönderilmiş olması gerekmektedir.

Yayın için değerlendirmeye alınacak makalelerde aşağıdaki kriterler gözetilir:

- Prehistorya, Protohistorya, Klasik Arkeoloji, Klasik Filoloji (ile Eskiçağ Dilleri ve Kültürleri), Eskiçağ Tarihi, Nümizmatik ve Erken Hıristiyanlık Arkeolojisi (İS 7. yüzyıla kadar) alanlarında yazılmış makaleler, yayın için değerlendirmeye alınır.
- Makaleler tanıtım veya katalog niteliklerinin ötesinde, araştırma sorusuna/ problemine dayanmalı, somut kanıtlar ve tartışmalarla desteklenen, verilerin tartışıldığı ve bağlantıların kurulduğu içeriklere sahip olmalıdır. Tartışma içermeyen ve kontekslerinden kopuk şekilde ele alınan arkeolojik malzemeler, kataloglar, buluntu raporları, derleme yazılar değerlendirmeye alınmaz.
- Olba Dergisi, Arkeoloji bilim dalını temsil eden bilimsel bir süreli yayındır. Bu sebeple, verileri farklı bilim dallarının (Harita Mühendisliği, Mimarlık, Arkeometri, Jeofizik ve Antropoloji vb.) işbirliği ile oluşturulan çalışmaların makalelerinde, arkeolojik değerlendirmenin ön planda tutulması beklenir.

Yazım Kuralları

1. a- Makaleler, Word ortamında yazılmış olmalıdır.

b- Metin 10 punto; özet, dipnot, katalog ve bibliografya 9 punto olmak üzere, Times New Roman (PC ve Macintosh) harf karakteri kullanılmalıdır.

c- Dipnotlar her sayfanın altına verilmeli ve makalenin başından sonuna kadar sayısal süreklilik izlemelidir.

d- Metin içinde bulunan ara başlıklarda, küçük harf kullanılmalı ve koyu (bold) yazılmalıdır. Bunun dışındaki seçenekler (tümünün büyük harf yazılması, alt çizgi ya da italik) kullanılmamalıdır.

2. Noktalama (tireler) işaretlerinde dikkat edilecek hususlar:

a) Metin içinde her cümlenin ortasındaki virgülden ve sonundaki noktadan sonra bir tab boşluk bırakılmalıdır.

b) Cümle içinde veya cümle sonunda yer alan dipnot numaralarının herbirisi noktalama (nokta veya virgül) işaretlerinden önce yer almalıdır.

c) Metin içinde yer alan "fig." ibareleri, parantez içinde verilmeli; fig. ibaresinin noktasından sonra bir tab boşluk bırakılmalı (fig. 3); ikiden fazla ardışık figür belirtiliyorsa iki rakam arasına boşluksuz kısa tire konulmalı (fig. 2-4). Ardışık değilse, sayılar arasına nokta ve bir tab boşluk bırakılmalıdır (fig. 2. 5).

d) Ayrıca bibliyografya ve kısaltmalar kısmında bir yazar, iki soyadı taşıyorsa soyadları arasında boşluk bırakmaksızın kısa tire kullanılmalıdır (Dentzer-Feydy); bir makale birden fazla yazarlı ise her yazardan sonra bir boşluk, ardından uzun tire ve yine boşluktan sonra diğer yazarın soyadı gelmelidir (Hagel – Tomaschitz).

3. "Bibliyografya ve Kısaltmalar" bölümü makalenin sonunda yer almalı, dipnotlarda kullanılan kısaltmalar, burada açıklanmalıdır. Dipnotlarda kullanılan kaynaklar kısaltma olarak verilmeli, kısaltmalarda yazar soyadı, yayın tarihi, sayfa (ve varsa levha ya da resim) sıralamasına sadık kalınmalıdır. Sadece bir kez kullanılan yayınlar için bile aynı kurala uyulmalıdır.

Bibliyografya (kitaplar için):

Richter 1977 Richter, G., Greek Art, NewYork.

Bibliyografya (makaleler için):

Corsten 1995 Corsten, Th., "Inschriften aus dem Museum von Denizli", Ege Üniversitesi Arkeoloji Dergisi III, 215-224, lev. LIV-LVII.

Dipnot (kitaplar ve makaleler için)

Richter 1977, 162, res. 217.

Diğer Kısaltmalar:

- age. adı geçen eser ay. aynı yazar vd. ve devamı yak. yaklaşık
- v.d. ve diğerleri
- v.dn. vukarı dipnot
- dn. dipnot
- a.dn. aşağı dipnot
- bk. Bakınız

- 4. Tüm resim, çizim, tablo ve haritalar için sadece "fig." kısaltması kullanılmalı ve figürlerin numaralandırılmasında süreklilik olmalıdır. (Levha, Resim, Çizim, Tablo, Şekil, Harita ya da bir başka ifade veya kısaltma kullanılmamalıdır).
- 5. Bir başka kaynaktan alıntı yapılan figürlerin sorumluluğu yazara aittir, bu sebeple kaynak belirtilmelidir.
- 6. Makale metninin sonunda figürler listesi yer almalıdır.
- 7. Metin yukarıda belirtilen formatlara uygun olmak kaydıyla 20 sayfayı geçmemelidir. Figürlerin toplamı 10 adet civarında olmalıdır.
- 8. Makaleler Türkçe, İngilizce veya Almanca yazılabilir. Türkçe yazılan makalelerde yaklaşık 300 kelimelik Türkçe ve İngilizce yada Almanca özet kesinlikle bulunmalıdır. İngilizce veya Almanca yazılan makalelerde ise en az 300 kelimelik Türkçe ve İngilizce veya Almanca özet bulunmalıdır. Makalenin her iki dilde de başlığı gönderilmeldir.
- 9. Özetin altında, Türkçe ve İngilizce veya Almanca olmak üzere altı anahtar kelime verilmelidir.
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- 11. Figürlerde çözünürlük en az 300 dpi; format ise tif veya jpeg olmalıdır; bunlar Microsoft Word türünde başka bir programa gömülü olmamalıdırlar.
- 12. Dizilim (layout): Figürler ayrıca mail ekinde bir defada gelecek şekilde yani düşük çözünürlükte pdf olarak kaydedilerek dizilimi (layout) yapılmış şekilde yollanmalıdır.

MERSIN UNIVERSITY 'RESEARCH CENTER OF CILICIAN ARCHAEOLOGY' JOURNAL 'OLBA'

PUBLISHING PRINCIPLES

Scope

The Journal 'Olba', being published since 1998 by the 'Research Center of Cilician Archeology' of the Mersin University (Turkey), includes original studies on Prehistory, Protohistory, Classical Archaeology, Classical Philology (and ancient languages and cultures), Ancient History, Numismatics and Early Christian Archeology (up till the 7th century AD) of Asia Minor, the Mediterranean and related regions.

Articles should present new ideas and not only have catalogues or excavation reports as their contents. The articles of archaeological studies undertaken together with other disciplines such as geophysics, archaeometry, anthropology etc should give more emphasis to the archaeological part of the work as the Journal Olba is an archaeological journal.

Olba is printed once a year in May. Articles can be sent from 31 August - 31 October each year.

Submission Criteria

1. a. Articles should be written in Word programs.

b. The text should be written in 'Times New Roman' in 10 puntos; the abstract, footnotes, catalogue and bibliography in 9 puntos (for PC and for Macintosh).

c. Footnotes should take place at the bottom of the page in continous numbering.

d. Titles within the article should be written in small letters and be marked as bold. Other choises (big letters, underline or italic) should not be used.

2. Punctuation (hyphen) Marks:

a) One space should be given after the comma in the sentence and after the dot at the end of the sentence.

b) The footnote numbering within the sentence in the text, should take place before the comma in the sentence or before the dot at the end of the sentence.

c) The indication fig.:

* It should be set in brackets and one space should be given after the dot (fig. 3);

* If many figures in sequence are to be indicated, a short hyphen without space between the beginning and last numbers should be placed (fig. 2-4); if these are not in sequence, a dot and space should be given between the numbers (fig. 2. 5).

d) In the bibliography and abbreviations, if the author has two family names, a short hyphen without leaving space should be used (Dentzer-Feydy); if the article is written by two or more authors, after each author a space, a long hyphen and again a space should be left before the family name of the next author (Hagel – Tomaschitz).

3. The 'Bibliography' and 'Abbreviations' should take part at the end of the article. The 'Abbreviations' used in the footnotes should be explained in the 'Bibliography'. The bibliography used in the footnotes should take place as abbreviations: Name of writer, year of publishment, page (and if used, number of the illustration). This rule should be applied even if a publishment is used only once.

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Richter 1977 Richter, G., Greek Art, New York.

Bibliography (for articles):

Corsten 1995 Corsten, Th., "Inschriften aus dem Museum von Denizli", Ege Üniversitesi Arkeoloji Dergisi III, 215-224, pl. LIV-LVII.

Footnotes (for books and articles)

Richter 1977, 162, fig. 217.

Miscellaneous Abbreviations:

- op. cit. : in the work already cited
- idem : an author that has just been mentioned
- ff : following pages
- et al. : and others
- n. : footnote
- see : see
- infra : see below
- supra : see above
- 4. For all photographies, drawings and maps only the abbreviation 'fig.' should be used in continous numbering (remarks such as Plate, Picture, Drawing, Map or any other word or abbreviation should not be used).
- 5. Photographs, drawings or maps taken from other publications are in the responsibility of the writers; so the sources have to be mentioned.
- 6. A list of figures should take part at the end of the article.

- 7. The text should be within the remarked formats not more than 20 pages, the drawing and photograps 10 in number.
- 8. Papers may be written in Turkish, English or German. Papers written in Turkish must include an abstract of 300 words in Turkish and English or German. It will be appreciated if papers written in English or German would include a summary of 300 words in Turkish and in English or German. The title of the article should be given in two languages.
- 9. Six keywords should be remarked, following the abstract in Turkish and English or German.
- 10. Figures should be at least 300 dpi; tif or jpeg format are required; these should not be embedded in another program such as Microsoft Word.
- 11. The article, figures and their layout as well as special fonts should be sent by e-mail (We Transfer).
- 12. Layout: The figures of the layout, having lesser dpi, should be sent in pdf format.

THE KOZAK PLATEAU IN ANTIQUITY: TOPONYMS, ROUTES AND NATURAL RESOURCES

Murat TOZAN*

ÖZ

Antikçağ'da Kozak Yaylası: Toponimler, Güzergâhlar ve Doğal Kaynaklar

Madra Dağlarının batıdaki uzantısı olan Kozak Yaylası kuzeyden ve batıdan Ege denizi boyunca uzanan kıyı ovalarıyla, güneyden ise Bakırçay Ovası ile çevrilidir. Doğrudan Kozak Yaylası'nın antik dönemini ele alan bütünlüklü bir çalışma bulunmamaktadır. Bu çalışmanın amacı Kozak Yaylası'nın antik toponimlerini, buradan geçen eski yol güzergâhlarını ve bu dağlık bölgenin doğal kaynaklarını bütüncül ve diyakronik bir bakış açısıyla değerlendirmektir. Ayrıca yaylanın antik adı için yeni bir öneri getirilmektedir. Antikçağ'da yaylayı batından sınırlayan kıyı ovaları Mytilene'nin peraia'sı idi. Güneydeki Bakırçay (Kaikos) ovasının başlıca yerleşmesi ise Pergamon idi. Dolayısıyla makalede Kozak Yaylası'nın Antikçağ'daki tarihsel coğrafyasının bu iki kentin bölgedeki ekonomik çıkarları bağlamında değerlendirilmesi gerekliliği de vurgulanmaktadır.

Anahtar Kelimeler: Kozak Yaylası, Pergamon, Mytilene, Bölgesel Tarih, Tarihsel Coğrafya.

ABSTRACT

The Kozak plateau, which is the western extension of the Madra Mountains, is surrounded by the coastal plains extending along the Aegean Sea from the north and west, and the Bakırçay Plain from the south. There is no comprehensive study that directly deals with the ancient period of the Kozak plateau. The aim of this study is to evaluate the ancient toponyms of the Kozak plateau, the old road routes passing through it and the natural resources of this mountainous region from a holistic and diachronic perspective. Moreover, a new proposal is put forward for the ancient name of the plateau. In antiquity the coastal plains bordered the plateau from the west were the peraia of Mytilene. The principal settlement of the Bakırçay (Kaikos) plain in the south was Pergamon. Therefore, the necessity of evaluating the ancient history of the Kozak plateau in the context of the economic interests of these two cities in the region is also emphasized.

Keywords: Kozak plateau, Pergamon, Mytilene, Regional History, Historical Geography.

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I am very grateful to the Bergama Municipality for providing transportation support to my field trips in the region.

Murat Tozan

The famous French historian Fernand Braudel in his voluminous and groundbreaking work, the Mediterranean and the Mediterranean World in the Age of Philip II, states that civilization spread horizontally along the plains and remained weak even at a few hundred meters of obstacle¹. Thus, the mountainous regions of the Mediterranean. which are far from the cities on the plains where civilization has concentrated and spread, and whose agricultural lands are limited, have been backward, poor and sparsely populated². Forests, animal products, rich water resources, especially mines and guarries in mountainous regions, however, constitute important economic advantages of mountainous regions compared to plains³. Therefore, plateaus with arable plains and suitable transportation opportunities with the lowlands can have the advantages of mountain and plain at the same time by accessing the natural resources on the one hand and the benefits of civilization on the other⁴. Hence, such plateaus are exceptions to the backwardness, poverty and sparse population of the mountainous regions. The Kozak plateau having convenient transportation and communication opportunities with the surrounding lowlands in addition to its rich natural resources and agricultural potential has been in a distinctive situation as a mountainous region since antiquity.

The Kozak mountainous region, consisting of a plateau and surrounding mountains, is a westward extension of the higher Madra Mountains in the east⁵ (fig. 1). In the north of the region lies the Edremit plain. In the west, from north to south, respectively, Ayvalık, Altınova and Dikili coastal plains are located. In the south, the Bakırçay (ancient Kaikos) basin borders the region. At the base of the Kozak plateau, there is an alluvial plain with a height of 400-500 m above sea level surrounded by mountains varying between 800 and 1000 m. The Madra River, whose main springs originate from the western slopes of the Madra peak, formed this NE-SW stretching plain. The ancient name of the Madra River should probably be Grylios, mentioned only in Pliny the Elder⁶. The length of this plain between Çamavlu and Göbeller villages is ca. 12 km, and its width between Hacıhamzalar and Yukarıbey villages, which is the widest part, is ca. 6 km. The peaks of the Madra Mountains in the northeast of the plateau and the Yaylacık Mountains in the northwest are quite steep and almost impassable (fig. 2). On the other hand, the elevations in the south and west are more suitable for passage. After crossing the alluvial

¹ Braudel 1972, 34.

² Braudel 1972, 29-35.

³ Braudel 1972, 42-43.

⁴ Braudel 1972, 53-58.

⁵ For the topographic and geomorphological structure and modern toponyms of the Kozak mountainous region, see von Diest 1889, 10-12, map 1; Philippson 1910, 84-87, map 1; Darkot – Tuncel 1995, 33; Kayan – Vardar 2007, 13-14, 19-21.

⁶ For Grylios see Plin. nat. 5.122; Stauber 1996a, 348. It is not certain whether this name applied in antiquity for the entire river system or for the lower part of the river in the delta plain. In the modern maps, different parts of the Madra River are referred to by different names. For example, while von Diest (1889, map 1) and Schuchhardt (1912, 64) calls the entire river system as Ayazmend Stream (Ajasmat-tschai), Philippson (1910, map 1) calls the upper part of the river on plateau as Kozak Stream (Kosak-Ts.) and the lower part of the river flowing in the delta plain as Ayazmend Stream (Ajasmat-Tschai). Berlet (1913) designates the upper part Madra Stream (Madaras Tschai) and the lower part Ayazmat Stream (Ajasmat Tschai). Kiepert (1906), on the other hand, names the part of the river close to its sources as Madra Stream (Madaras Ts.), the part flowing on the plateau as Kozak Stream (Kozak Ts.), the part flowing in the canyon again as Madra Stream (Madaras Ts.) and the part flowing in the delta as Ayazmend Stream (Ajazmand Ts.).

plain on the plateau, Madra River enters in a canyon between the elevations in the west and descends to the plain near Bahçeli village, after that, it reaches the Aegean Sea by passing the delta plain it has formed which is called Altinova today.

Almost throughout antiquity, the coastline, which surrounds the Kozak plateau from the north and west from Adramytteion, modern Ören, to Atarneus near modern Dikili, was the peraia of Mytilene, which was located on the eastern part of Lesbos Island opposite this littoral⁷. In the Kaikos Basin in the south, Pergamon is located at a point where the southernmost extensions of the Kozak Mountains extend towards the plain. Although Pergamon has existed as a city in the classical period, it has been the main political, social and economic center of the Kaikos/Bakırçay Basin as a royal capital and metropolis since the Hellenistic times. Therefore, while the Kozak plateau constitutes a barrier separating the aforementioned coastal region and the Kaikos/Bakırcay Basin: on the other hand, it is a contact area connecting these two regions. In this respect, revealing the historical geography of the Kozak plateau in antiquity is very important for the ancient history and archeology of the North Aegean region. There is no comprehensive study, however, that directly covers the ancient period of the plateau. Thus, the main objective of this paper is to reveal the history and historical geography of the Kozak plateau from the Classical period to the end of Byzantine era with holistic and diachronic view in the light of the literary, epigraphic, numismatic and archaeological evidence.

First, it would be appropriate to discuss the name of the Kozak plateau and its surrounding mountains in antiquity. Although the name of the plateau and mountains in ancient times is not exactly known, there are two different views among the researchers in this subject. According to these views, either Pindasos, in Pausanias and Pliny the Elder, or Mount Teuthras, mentioned by Ktesias of Knidos and Pseudo Plutarch, could be the ancient name of the Kozak plateau and mountains or a part of them. Within the scope of the first view, Pausanias, does not give any information about the location of Pindasos, but mentions that Archias, the founder of Pergamene Asklepieion, was wounded while hunting here, and brought the cult of Asclepius to Pergamon after he had been treated at Asklepieion in Epidauros⁸. Pliny the Elder writes about Pindasos as follows "by far the most famous place in Asia, Pergamum, which is traversed by the river Selinus and bordered by the river Cetius, flowing down from Mount Pindasus^{"9}. Since the source of the river Cetius or Keteios, modern Kestel, is originated just southeast of the summit of Madra Mountains, it is more plausible that Pindasos is the name of the Madra summit or Madra Mountains just east of Kozak plateau. Accordingly, the Kiepert and Philippson maps from the beginning of the 20th century, and more recently J. Stauber and Barrington Atlas matches Madra Mountains with Pindasos¹⁰.

⁷ For the history and extent of the Mytilenaian Peraia, see Stauber 1996a, 163-165; Funke 1999, 62; Carusi 2003, 19-90; Constantakopoulou 2007, 240-241; Ellis-Evans 2019, 155-197.

⁸ Paus. 2.26.8.

⁹ Plin. nat. 5.126 (transl. Rackham). These rivers are called Keteios (Κήτειος) and Seleinous (Σελεινοῦς) on the Pergamene coins from the reign of emperor Marcus Aurelius, see BMC Mysia 146 no. 287 = SNG Cop. Mysia 486. Cf. SNG France 5.2103.

¹⁰ Kiepert 1906; Philippson 1910; Stauber 1996a, 345; Barrington 2000, 851, map 56 E 3.

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Ktesias mentions of a stone called antipathes (lit. *against disease*) that comes from the mountain called Teuthras and he does not give a clue about the location of this mountain¹¹. Pseudo Plutarch, who quoted the information related to the antipathes, adds that the Mount Teuthras is situated nearby Kaikos and it was named after Teuthras, the king of Mysia, who gave also his name to Teuthrania¹². According to Pseudo Plutarch, when King Teuthras was hunting on Mount Thrasyllos, he hunted a wild boar who took refuge in the Temple of Artemis Orthosia on this mountain, and then was punished by the goddess with madness and leprosy. Nevertheless, when the king's mother appeased the goddess, he regained his health and since then, Mount Thrasyllos was called Mount Teuthras. In this narrative, the only information about the location of the Mount Teuthras is that "it is nearby Kaikos River".

Again the Kiepert, Philippson and Barrington maps define the mountains surrounding the Kozak plateau in the south as Mount Teuthras¹³. There is no information, however, on what this localization was based on. The relevant *Paulys Realencyclopädie* article, cited by Barrington Atlas, says only "a mountain in Mysia" with regard to Mount Teuthras¹⁴. W. Smith, in his *Dictionary of Greek and Roman Geography* in the mid-19th century, proposes for Mount Teuthras the southern part of much further eastern Mount Teunos¹⁵. Consequently, there is no data available on the ancient sources for the precise location of Mount Teuthras, and modern researchers cannot explain why this toponym is located to the southern part of the Kozak Mountains.

Some researchers do not accept the Pindasos – Madra identity, instead they match Pindasos with the Kozak Mountains. These include C. Schuchhardt and O. Berlet from the early twentieth century, more recently W. Radt and B. Ludwig¹⁶. None of the mentioned authors, however, has any argumentation about Kozak – Pindasos equation. In consequent, when looking at the modern sources regarding the locations of Pindasos and Teuthras, the following table is encountered:

SOURCE	PINDASOS	MOUNT TEUTHRAS
Smith 1854	-	Temnos, S
Kiepert 1906	Madra	Kozak, S
Philippson 1910	Madra	Kozak, S
Schuchhardt 1912	Kozak, S-SE	-
Berlet 1913	Kozak, S-SE-E	-
Stauber 1996a	Madra	-
Radt 1999	Kozak	-
Barrington 2000	Madra	Kozak, S
Ludwig 2020	Kozak	-

11 Ktesias, FGrH 688 F. 73 = Ps.-Plut. fluv. 21.5 = Stob. anth. 4.36.20.

12 Ps.-Plut. fluv. 21.4-5.

13 Kiepert 1906; Philippson 1910; Barrington 2000, 851, map 56 E 3.

14 Ruge 1934, 1164. Cf. Barrington 2000, 853.

15 Smith 1857, 1133.

16 Schuchhardt 1912, 64; Berlet 1913; Radt 1999, 11, 18-19; Ludwig 2020, 1, 2.

Literary and epigraphic evidence, however, indicate that Mount Teuthras should be sought in the west of Teuthrania, in a location near where Kaikos was poured into the sea, rather than south of the Kozak plateau. The stone antipathes, which is mentioned by Ktesias that came out of Mount Teuthras and was a remedy for skin diseases, is actually a kind of petrified black coral¹⁷. Again as mentioned earlier, Pseudo Plutarch states that there is a temple of Artemis Orthosia on the Mount Teuthras¹⁸. The only inscription that mentions Artemis Orthosia both in or near Lower Kaikos Basin and even throughout Western Asia Minor was found in Bademli village, where ancient city of Kane is located not far from Teuthrania¹⁹ (fig. 1). The letter characters date the inscription to the late 4th and early 3rd centuries BC. The dimensions of the stone with the inscription suggest that it was a boundary stone belonging to the sanctuary of Artemis Orthosia²⁰. Therefore, Mount Teuthras should be located close to the sea around the lower part of Kaikos rather than on or near to Kozak plateau. In this case, even the lofty hill on which Teuthrania is located could be the Mount Teuthras itself.

It is obvious that the evidence for the ancient name of the Kozak plateau is rather inadequate and the views so far have been far from a convincing discussion and justification. Obviously, the name Pindasos is more suitable for the Madra Mountains and Mount Teuthras should be located in the parts of the Lower Bakırçay basin close to the sea. At this stage, I would like to suggest a new opinion on this subject. An information that has never been considered so far for the ancient name of the Kozak Mountains comes from the famous Mysian orator Aelius Aristeides, who lived in the 2nd century AD. During his residence in the Pergamene Asklepieion in the winter of 145/146, Asklepios ordered him in a dream to bathe in the river flowing through the city²¹. Even though Aristeides did not mention the name of the river. Selinos was the only river flowing through the city in ancient times as today. Aristeides and his companions had walked upstream, to reach a point where the dirty water flowing from the city did not pollute the river. Aristeides states that accordingly they "went further up along the road to Hippon"²². The word Hippon means "place for horses", "horse stable" or "station" and the name of this place or location around Pergamon does not appear in any other source²³.

According to this Aristideian evidence, Hippon may be either a settlement or location on the way up the road along Selinos, or the ancient name of the Southeastern Kozak Mountains where the road climbed or the entire Kozak plateau where the road

¹⁷ For antipathes (black coral) and its usage in the ancient medicine, see. Diosk. mat. med. 5.122; During-Caspers 1986; 26-29; Nichols 2011, 166.

¹⁸ Ps.-Plut. fluv. 21.4.

¹⁹ Conze – Schuchhardt 1899, 202 no. 3 = Stauber 1996b, 56 no. 47. See also Stauber 1996a, 283.

²⁰ Stauber 1996b, 56.

²¹ Aristeid. hier. log. 2.51.

²² Aristeid. hier. log. 2.52: καὶ γὰρ ἀνῆμεν ἀνωτέρω τὴν ἐφ' Ἱππωνος (transl. Behr).

²³ For Hippon see LSJ 835 s.v. iππών, -ῶνος. The North African toponym of Hippo/Hippon such as Hippo Regius = Ίππὼν Βασιλικός (Ptol. geogr. 4.3.5; Miller 1916, 911; Barrington 2000, 485); Hippo Diarrhytus = Ίππὼν διάρρυτος (Ptol. geogr. 4.3.6; Miller 1916, 910-911; Barrington 2000, 498) and Hippon (in Latin: Itin. Anton. 68.4, 71.1; Miller 1916, 874; Barrington 2000, 562) must be Punic or local in origin, see Lipinski 2004, 383-384, 389-390.

reaches. K. M. Sommerey, the only modern researcher to deal with this toponym as far as I know, suggests that Hippon was a village settlement in the Selinos valley²⁴. However, when Aristeides uses the verb $\epsilon i\mu$, meaning "to go", with various prefixes, he indicates the main location, with the preposition $\epsilon \pi i$ meaning "towards/upon (a place in genitive case)", where the road reaches and forks²⁵. Thus, it may be concluded that with Hippon, Aristeides means the Kozak plateau, where the road reaches after proceeding upwards along the Selinos River. This road is still called "Kozak Yolu" (Kozak Road) among the local people²⁶. Because the Kozak plateau is famous for the herds of wild horses in its forests today, it is also meaningful that Hippon means "horse place". Although this view also is hypothetical, it seems to be a stronger possibility for the ancient name of Kozak plateau than Pindasos and Teuthras.

Besides Hippon, many other toponyms related to the Kozak plateau are mentioned in the ancient sources. It is appropriate to deal with these toponyms by associating them with the roads that cross here and connect the Adramytteion and the Mytilenaian Peraia to Pergamon. When looking at the Tabula Peutigeriana, which is the most comprehensive map showing the roads from the antiquity and dated to 4th century AD, it could be seen that the road leading to the south following the coast from the Hellespont is divided into two lines after Adramytteion (fig. 3). One line of this forked road follows the coast and crossing the Mytilenaian Peraia reaches the Lower Kaikos Basin, while the other line runs further from the east, i.e. from the inner region, and reaches Pergamon directly²⁷. The third century AD Itinerarium Antonini, an official register on the various settlements and distances among them, indicates that the distance between Adramytteion and Pergamon was 53 Roman miles (about 78,3 km)²⁸. This suggests that the *Itinerarium Antonini* follows the inner road rather than the coastal one. Because the coastal road between Adramytteion and Pergamon is around 90 kilometers, but the distance 78.3 km given in the Itinerarium Antonini is almost exact distance of the modern road running through Kozak Mountains between Bergama and Ören where the remains of Adramytteion are located²⁹. Xenophon who came from Adramytteion to Pergamon with his army on the return from the Persian expedition in 399 BC should have followed this inner route³⁰. The fact that Xenophon did not mention Atarneus, the most important city on the coastal road between Adramytteion and Pergamon in that time, suggests that his army followed the road passing over the Kozak plateau³¹. This road proceeds from Adramytteion to the southwest, follows Karınca creek, and climbs towards Kozak plateau, leaving Hisarköy to the right where there is a Late Roman/Byzantine fortress controlling this route. Then it reaches Tekkeköy (Güneşli) after crossing the Capacı/Carpacık Pass, at the 900 meters altitude,

²⁴ Sommerey 2008, 155-156.

²⁵ See e.g. Aristeid. hier log. 2.11: ἀπήειμεν οὖν τὴν ἐπὶ Σμύρνης (we went off on the road to Smyrna), 5.1: καὶ ἐξήειμεν τὴν ἐπὶ Περγάμου (and we went out on the road to Pergamum) transl. Behr.

²⁶ Eriş 1996, 29-30. Cf. von Diest 1889, 9; Radt 1999, 273, 274.

²⁷ Tab. Peut. seg. 9.3-4 (Miller); Miller 1916, 715, 693-694 map 228.

²⁸ Itin. Anton. 335.2-3.

²⁹ Tozan 2017, 549. It has been calculated that a Roman mile = 1478 m, see Duncan-Jones 1982, 371. Miller (1962, 4) accepts this distance as 1482 m.

³⁰ Xen. an. 7.8.7.

³¹ See Stauber 1996a, 331; Külzer 2016a, 195; Külzer 2016b, 61-62.

from here continues towards south along the plateau and near the village of Yukarıbey joins with the modern Ayvalık – Bergama road, which seemingly corresponds the other ancient route between the coast and Pergamon. After the junction, the road follows the Selinos valley and reaches Pergamon³². The German traveler Otto Magnus von Stackelberg, who visited the region in 1811, stated that he reached Bergama from Edremit through the mountains³³. This indicates that the route was actively used until the 19th century.

Xenophon, in his Anabasis, while describing march of his army from Adramytteion to Pergamon, does not mention about Perperene, the most important city of the plateau, which I will talk about later, but wrote that his army reached Pergamon through Kertonon³⁴. Considering this information in Xenophon, it could be assumed that the ruins at Asar Tepe between the villages of Çamavlu and Tekkeköy (mod. Güneşli) to the south of the Çarpacık pass belong to ancient Kertonon³⁵ (fig. 4). The fact that the German archaeologist E. Fabricius, who researched these remains at the end of the 19th century, indicated that the wall technique in the ruins was similar to the early Hellenistic walls of Pergamon, reinforces the possibility that this settlement might be Kertonon³⁶. A settlement called Kytonion, which was said between Mysia and Lydia by Stephanos Byzantios, quoting 4th century BC historian Theopompos, is thought to be identical with Kertonon in Xenophon³⁷.

Perperene was the most important ancient settlement on the Kozak plateau in the Antiquity. The name of the city is written in various forms in the ancient literary sources³⁸. The earliest evidence of Perperene is the coins dating back to the 4th century BC³⁹. Souda, the Byzantine encyclopedia, states that the Mytilenaian historian Hellanikos of Lesbos, who lived in the fifth century BC, died in Perperene⁴⁰. When Stephanos Byzantios wrote that the famous Athenian historian Thucydides, who lived in the same century, had died in Perperene, he should have possibly written his name by mistake instead of Hellanikos⁴¹. The fact that Hellanikos of Mytilene spent the last years of his life in Perperene at the end of the 5th century BC is important in terms of

³² For this route, see Fabricius 1886, 2; von Diest 1889, 10; Philippson 1910, 85-8 with Map 1; Magie 1950, 793 with n. 19; Barrington 2000, map 56 D 3, E 3; Külzer 2016a, 195; Külzer 2016b, 61-62; Tozan 2017, 549-550, 563 fig. 1; Ludwig 2020, 9-10 and fig. 6, 29 with fig. 27.

³³ von Stackelberg 1882, 129-130.

³⁴ Xen. an. 7.8.8.

³⁵ von Diest 1889, 10; Philippson 1910, 85; Schuchhardt 1912, 124 no. 39; Stauber 1996a, 331-332; Rubinstein 2004, 1036; Tozan 2017, 550.

³⁶ Fabricius 1886, 13-14.

³⁷ Steph. Byz. s.v. Kytonion; Stauber 1996a, 330-331; Rubinstein 2004, 1036-1037; Külzer 2016a, 195.

³⁸ The city is mentioned as Parparon (Παρπάρων) by Stephanos Byzantios (s.v. Parparon), as Perpere (Περπέρη) or Permere (Περμέρη) by Ptolemy (geogr. 5.2.16) and Perperine (Περπερίνη) in the Notitiae (e.g. Not. episc. 1.114, 2.130). Nevertheless, according to the evidence from other ancient writers (see e.g. Strab. 13.1.51; Plin. nat. 5.122) as well as from the epigraphic (I. Smyrna 447, 469, 689) and numismatic (see e.g. Stauber 1996b, 322 no. 66) records, the name of the city was apparently Perperene (Περπερήνη). See also Stauber 1996a, 291-294; Rubinstein 2004, 1048-1049.

³⁹ SNG France 5.2309-2310; Barth – Stauber 1994, 61-62 = Stauber 1996b, 311-312 no. 1-11. Cf. BMC Mysia 168 no. 1-2; SNG Cop. Mysia 520-522; Rubinstein 2004, 1049.

⁴⁰ Souda, s.v. Hellanikos.

⁴¹ Steph. Byz. s.v. Parparon; Stauber 1996a, 293.

proving that this settlement was in close relationship with Mytilene and her peraia in that time. Souda also emphasizes that Perperene, where Hellanikos died, is opposite Lesbos⁴². We do not have any information why Hellanikos settled in Perperene. As we know, however, from the examples Mytilene, Samos and Chios, the peraiai of the island cities were the places where opposing political factions settled⁴³. Perhaps because of a political conflict, Hellanikos had settled in Perperene, the city immediately adjacent to the Mytilenaian peraia. It also should be noted that it is possible to see the Aegean Sea and Lesbos through a mountain crevice from the upper rows of the Perperenian theatre (fig. 5).

Although no epigraphic documents were found from Perperene and its vicinity⁴⁴, the city is mentioned in three Smyrnaian inscriptions⁴⁵. After the coins of fourth century BC, no coin belonging to the Hellenistic period has been found so far and the Perperene started to stuck coins during the Roman Imperial Period until the middle of the third century AD⁴⁶. Strabo, while listing the cities on the coast from Assos to Elaia, also mentions Perperene among the important settlements in the inner region⁴⁷. As we learned from Pliny the Elder, the city was within the Pergamene conventus in the 1st century AD^{48} . The Byzantine writer Hierokles in his work listing the provinces of the Eastern Roman Empire and the cities belong to them in the beginning of the sixth century AD, mentions Theodosioupolis as one of the cities of Asian province. which was formed after the reforms of Diocletian and Constantine the Great⁴⁹. In the official documents of the Byzantine period called Notitiae Episcopatuum, which lists the hierarchical order of the bishoprics of the Orthodox Church, the name of the city appears as "Theodosioupolis or Perperine"⁵⁰. In the Notitiae from the 7th to the 12th century, both names of the city are mentioned, whereas in some others the city is simply called Theodosioupolis⁵¹. The listing of Perperine also as a suffragan under Mytilene in the Notitiae from 9th to 10th centuries, suggests that Perperene belonged ecclesiastically to the diocese of Mytilene for a while in the Byzantine period⁵².

The ruins of Perperene are about 1 km north of the village of Aşağıbey. Although the oldest remains in the settlement belong to the early Hellenistic period, it is proposed that the older architectural elements were under the Hellenistic and later constructions⁵³. Among the ruins that vast majority belonging to the Roman imperial period, the sarcophagi as well as the theater and some monumental structures are

49 Hierokl. synekd. 661.9.

51 Not. episc. 2.129, 3.138.

⁴² Souda, s.v. Hellanikos: καὶ ἐτελεύτησεν ἐν Περπερήνῃ τῇ κατ' ἀντικρὺ Λέσβου.

⁴³ See Funke 1999, 69; Constantakopoulou 2007, 251.

⁴⁴ Only a grave inscription with two words (Διογένης [Δι]ογένου) recorded in Gömeç may have been brought from the village Demircidere near Perperene, see Stauber 1996a, 293; Stauber 1996b, 57 no. 49.
45 I. Smyrna 447, 469, 689.

⁴⁶ BMC Mysia 168-170 no. 3-14; SNG Cop. Mysia 523-529; SNG France 5.2311-2330; Barth – Stauber 1994. 62-77 = Stauber 1996b, 312-323 no. 12-70.

⁴⁷ Strab. 13.1.51.

⁴⁸ Plin. nat. 5.126.

⁵⁰ Not. epise. 1.114 4.123. 7.151, 9.46-47, 10.42-43; 13.46-47.

⁵² Not. episc. 7.683, 9.554, 10.665, 13.733. See also Kaufmann - Stauber 1994, 44.

⁵³ Stauber 1996a, 303; Rubinstein 2004, 1049.

remarkable⁵⁴. The Okçular Castle, located ca. 2 km north of Perperene with its substantial Late Antique/Early Byzantine architectural remains, must be the place where the city moved under the name Theodosioupolis⁵⁵. The reason for the move should be the location of the castle, which was more suitable for defense⁵⁶.

Parallel to the development of Pergamon as a royal capital during the Hellenistic period, Perperene maintained its importance because of its location on the road from Pergamon to the Mytilenaian peraia. This road, which is the main route passing through the region even today, was undoubtedly the most important route in the ancient period for Perperene and other settlements on the Kozak plateau, in order to reach the sea by the easiest way⁵⁷. This road was passable in both summer and winter. In addition to this route, which was called the "winter road" (K1ş Yolu) by the residents, there was also another route, known as the "summer road" (Yaz Yolu) which reaches the coast more directly. The summer road starting from the Aşağıbey village on the opposite hills of Perperene, proceeds to the southwest over a sub-branch of the Madra River, meets the its main body near the hot springs (Aşağıbey) and from here reaches the delta plain. Since this road required crossing the river many times, however, as its name indicates, it could only be passed in the summer months when the water level was low⁵⁸.

It is suitable to match the remains of an ancient settlement on Asar Kaya (or Sakar Kaya), 1 km east of Göbeller village, on the road between Perperene and Pergamon, at the point where the Madra River exits the plateau and enters the canyon, with the toponym called Tiarai which is mentioned in the ancient sources⁵⁹ (fig. 2). The most comprehensive information about the location of the Tiarai comes from Theophrastos of Lesbos. According to him, truffles in the Mytilenaian peraia grew when the floodwater of the rains from the Tiara carried their seeds to the shore and this plant grew especially on the seashore where the soil is sandy just like in Tiarai⁶⁰. The soil around Asar Kaya, located on the left bank of the Madra Stream, is quite sandy. Moreover, Asar Kaya is the last prominent ancient settlement before the Madra River descends to the delta plain. All this evidence supports location of Tiarai on Asar Kaya near Göbeller village. While Strabo lists the coastal settlements from Assos to Elaia from north to south, states that above Kisthene (near modern Gömeç) after a copper mine lies Perperene

⁵⁴ See Fabricius 1886, 1-13; von Diest 1889, 11; Conze – Schuchhardt 1899, 147; Philippson 1910, 86; Schuchhardt 1912, 123 no. 36; Kaufmann – Stauber 1994, 44-50; Stauber 1996a, 296-301.

⁵⁵ Fabricius 1886, 10-12; Stauber 1996a, 310-319.

⁵⁶ Fabricius 1886, 11; Stauber 1996a, 315-316.

⁵⁷ See von Diest 1889, 11-12; Philippson 1910, 86; Radt 1999, 20-21; Pirson 2008, 43; Tozan 2017, 550, 563 fig 1; cf. Ludwig 2020, 10, 28 with fig. 26.

⁵⁸ von Diest 1889, 12; Ludwig 2020, 28 and fig. 26.

⁵⁹ Tiarai (Tiara/Tiare) Theophr. frg. 167 = Athen. deipn. 2.62b-c; Hepding 1910, 422 no. 11 col. I l. 12; Plin. nat. 5.126, 19.37; Hierokl. synekd. 661.8. Asar/Sakar Kaya: Conze – Schuchhardt 1899, 147-148; Philippson 1910, 86; Schuchhardt 1912, 123 no. 38; Stauber 1996a, 328-330.

⁶⁰ Theophr. frg. 167 = Athen. deipn. 2.62b-c; cf. Plin. nat. 19.37. Theophrastos refers to the peraia on the opposite mainland coast with the phrase "coast of the Mytileneans" (αἰγιαλὸς τῶν Μιτυληναίων). Strabo too simply says "coast" (αἰγιαλὸς) to denote the peraia of Mytilene, Strab. 13.1.49: "ὁ τῶν Μιτυληναίων ἐστὶν αἰγιαλὸς". Cf. Constantakopoulou 2007, 240, 246; Ellis-Evans 2019, 179. Perhaps this phrase was employed specifically for the part of the Mytilenaian peraia on the direct opposite coast between Adramytteion and Atarneus, see Carusi 2003, 47-48.

and Trarion in the inner region⁶¹. The inner region, which Strabo defined as *mesogaia*, was undoubtedly the Kozak plateau, and here he listed the toponyms on the road connecting the Mytilenaian Peraia to Pergamon over it. The toponym Trarion is not attested in any ancient source other than Strabo. Today, when one follows the modern Ayvalık-Bergama road, after passing the still active mining area and proceeding in front of the Perperene ruins, the Madra River is crossed near the aforementioned Asar Kaya and after leaving the plateau reaches Bergama via the Selinos valley. Since there are no other important settlement remains on this road, it is understood that Strabo probably wrote Trarion instead of Tiarai by mistake⁶². The toponym called Tiare is found in the Hellenistic ephebic lists of Pergamon⁶³. Pliny the Elder counts Tiare within the Pergamene conventus in the 1st century AD⁶⁴. The Tiarai continued to exist in the reduced borders of the Asian province from the 4th century AD⁶⁵.

The Mytilenaian Peraia had been covered almost the entire northeastern coast of Asia Minor, from the Hellespont in the north to Atarneus in the south already from 8th century BC⁶⁶. After an unsuccessful uprising against Athens in 427 BC, however, Mytilene lost all her possessions on the mainland⁶⁷. Although Mytilene regained its possessions on the mainland after the end of the Peloponnesian war in 404 BC, the city lost the northern part of its peraia permanently and was able to regain only the southern part from Adramytteion to Atarneus⁶⁸. It is known that for Mytilene the Ida Mountains, which were adjacent to the peraia, were an important source of material⁶⁹. As Mytilene permanently lost its peraia on the coast of Troas in 427 BC, its direct access to Mount Ida was also lost. When Mytilene recovered the southern part of its peraia from Adramytteion to Atarneus at the end of the 5th century BC, the Kozak plateau, which was adjacent to the peraia from the east, must have gained importance in terms of its direct access to materials. The choice of Perperene "just across Lesbos" adjacent to the peraia as a place of exile by Hellanikos and mention of Theophrastos about the connection of Tiarai with the peraia reveal the close relationship of the Kozak plateau with the Mytilenaian peraia in the late 5th and 4th centuries BC. In this regard the prominence of Perperene enough to mint coins in the 4th century BC can be associated with its economic development in that period.

The rise of Pergamon, in the south, as a royal capital and metropolis in the Hellenistic period caused the Kozak plateau to be under the politic and economic influence of Pergamon. The cessation of Perperenian coins in the Hellenistic period⁷⁰ and the mention of Tiarai in the Hellenistic ephebic lists of Pergamon are direct results of the Pergamene influence in the region. The presence of Perperene and Tiarai in the

⁶¹ Strab. 13.1.51. For the localization of Kisthene, see. Stauber 1996a, 157-160; Rubinstein 2004, 1043.

⁶² Stauber 1996a, 326-327; cf. Sommerey 2008, 145 n. 35.

⁶³ Hepding 1910, 422 no. 11 col. I l. 12: Άρτέμων Τηλέφου Τιαρηνός.

⁶⁴ Plin. nat. 5.126.

⁶⁵ Hierokl. synekd. 661.8.

⁶⁶ Funke 1999, 62; Carusi 2003, 19-58; Constantakopoulou 2007, 240; Ellis-Evans 2019, 157-158.

⁶⁷ Thuk. 3.50.3, cf. 4.52.2-3, 4.75.1.

⁶⁸ Funke 1999, 62; Carusi 2003, 44-46, 65-67; Constantakopoulou 2007, 241; Ellis-Evans 2019, 158.

⁶⁹ See e.g. Carusi 2003, 202-207. Cf. Ellis-Evans 2019, 57-106.

⁷⁰ Pirson 2008, 43-44.

Pergamene conventus during the Roman period indicates that Pergamon continued to be a center for the plateau in this period. The Pergamene influence over the Kozak plateau from the Hellenistic Period, however, should not mean that the connection of the plateau with the Mytilenaian peraia on the coast has completely ended since then. The listing of Perperene ecclesiastically under Mytilenaian administration in Byzantine period strongly indicates the ongoing relationship between Mytilene and the plateau since the classical period.

At this point, the following question arises. What were the resources that made the Kozak plateau economically important for both Mytilene and Pergamon? Numismatic and ancient literary evidence of Perperene indicates that the most important agricultural activity in the Kozak plateau in antiquity was viticulture. The bunch of grapes as the main reverse figure of the Perperentian coins from the 4th century BC to the Roman imperial period is the clearest evidence of the viticulture⁷¹. Undoubtedly, a wine production industry developed accordingly⁷². Perperenian wine were renowned, in the nearby region. The famous Pergamene physician Galen, from the 2nd century AD, praises the Perperentian wine⁷³. The main reason why the plateau attracted the attention of Mytilene, which was one of the main wine importers in the classical period, should be its vinevards⁷⁴. Viticulture and winemaking are still among the main agricultural activities on the plateau today⁷⁵. On the fertile alluvial plain of the Madra River, sufficient amount of grain, fruit and vegetables should be produced to meet the needs of the settlements on the plateau⁷⁶. Pines and Valonia oaks, as the natural vegetation of the plateau, were a valuable source of raw materials for timber and charcoal⁷⁷. The use of acorn, the fruit of the Valonia oaks, for tanning must have made the Kozak plateau an invaluable source for material for the leather industry, which we know to have been both in Pergamon and in Mytilene in antiquity⁷⁸. Galen, again, writes that during a famine around Pergamon, people ate the acorns which they normally feed to

⁷¹ See Barth - Stauber 1994, 59; Stauber 1996b, 309-310; Sommerey 2008, 162; Pirson 2008, 45.

⁷² Fabricius 1886, 4.

⁷³ Gal. de san. tuenda 5.5 (CMG 5.4.2.145 = 6.337K), de bon. mal. suc. 11 (CMG 5.4.2.420, 423 = 6.800K, 805K), meth. med. 12.4 (10.833K), in Hipp. de victu acut. comm. 3.7 (CMG 5.9.1.228 = 15.645K); Gal.de victu att. 102 (CMG 5.4.2.449).

⁷⁴ See Funke 1999, 66. For the wine export of Mytilene, see Clinkenbeard 1982, esp. 254-256; cf. Magie 1950, 45, 806-807 n. 44.

⁷⁵ Fabricius 1886, 4; von Diest 1889, 11.

⁷⁶ For grain production by the peasants in the region above Pergamon, apparently on the Mysian side where Kozak plateau is also located, both for themselves and for the cities, see Gal. de alim. fac. 1.13 (CMG 5.4.2.239 = 6.518K), 1.14 (CMG 5.4.2.241 = 6.522K), Gal.de victu att. 40-41 (CMG 5.4.2.439-440); Broughton 1959, 608, 609, 685. Cf. Philippson 1910, 85-86; Sommerey 2008, 145 with n. 36; 161 n. 119.

⁷⁷ Cf. Theophr. h. plant. 3.8.1-5; Pantera et al. 2018, 923; see also Philippson 1910, 85-86; Darkot – Tuncel 1995, 33; Radt 1999, 284; Sommerey 2008, 164; Zimmermann 2011, 12-13.

⁷⁸ For the use of acorns of the Valonia oaks in tanning in antiquity, see e.g. Theophr. h. plant. 3.8.6; Pantera et al. 2018, 922. For the manufacture of parchment and leather products in Pergamon, see Plin. nat. 13.70; Rostovtzeff 1941, 564-565; Broughton 1959, 824-825; Hansen 1971, 214-215; Magie 1950, 49, 814 n. 90; Radt 1999, 287-288; Sommerey 2008, 166-167. In ancient Mytilene, the leather industry was so significant that its producers formed a guild, see IG XII.2.108-109 = SEG 26.891; Magie 1950, 49; Broughton 1959, 824.

pigs⁷⁹. The natural environment of the plateau, which was/is suitable for cattle, sheep and goat herds, provided skins for the leather industry, as well as a source of milk and dairy products⁸⁰. In this respect, it is noteworthy that Galen mentions a type of cheese unique to Pergamon and in Mysian region above Pergamon where Kozak plateau is included⁸¹. The herds on the plateau must also be among the suppliers of wool for the famous Attalid tapestries and fabrics⁸². The mention of hunting in the narratives of both Teuthras and Archias and the reference of Galen to the hunters around Pergamon proves the significance of hunting in the region⁸³. In this respect, the forests in the mountains surrounding the plateau must have been an attraction for hunters⁸⁴. The toponym Hippon in Aristeides implies the horses of the plateau were also famous⁸⁵.

The richness of plateau in terms of stones and mines also made it attractive for the surrounding regions. There are rich granite and andesite deposits on the plateau⁸⁶ (fig. 6). It is determined that the granite used in the ancient buildings of Bergama came from Kozak plateau⁸⁷. It is also proven that Kozak granite was used in ancient buildings in Mytilene⁸⁸. The granite quarries still continue their activities widely in the plateau⁸⁹. It is also proposed that the marble from Akkaya may have been used in ancient Pergamon⁹⁰. The mine, which was stated by Strabo in his above-mentioned paragraph as between Kisthene and Perperene in the inner region, is the mine that is still being operated between Demircidere and Karaayıt villages on the Ayvalık-Bergama road⁹¹. Although this place is operated as an iron mine today, the name of the mountain where the mine is located, Bakırlık (lit. copper area), indicates that copper mines were more commonly operated here in antiquity. According to the 19th century researchers, there were copper and silver mines near the Çarpacık/Çapacı pass, about 2.5 km north of Asartepe where the ancient Kertonon was localized⁹². Although this mine is not

⁷⁹ Gal. de alim. fac. 2.21 (CMG 5.4.2.305 = 6.620K).

⁸⁰ For the herds of cattle owned by the Attalids, see Rostovtzeff 1941, 563, 1450-1451 n. 330; cf. Radt 1999, 284.

⁸¹ Gal. de alim. fac. 3.16 (CMG 5.4.2.354 = 6.697K), de simpl. med. temp. et fac. 10.9 (12.272K). Cf. Sommerey 2008, 145 with n. 36, 162.

⁸² For the industry of textile and woolen stuffs in Pergamon, see Rostovtzeff 1941, 563-564; Broughton 1959, 818; Magie 1950, 48, 812 n. 82; Hansen 1971, 231-214; Radt 1999, 285; Sommerey 2008, 167-1678.

⁸³ Paus. 2.26.8 (Archias); Ps.-Plut. fluv. 21.4 (Teuthras); Gal. de alim. fac. 3.2 (CMG 5.4.2.335 = 6.665K).

⁸⁴ Cf. Radt 1999, 284.

⁸⁵ Note that the Pergamene region was famous for breeding of good quality horses, see Rostovtzeff 1941, 563, 1450 n. 330; Hansen 1971, 210; Radt 1999, 284.

⁸⁶ Philippson 1910, 85-87; Darkot - Tuncel 1995, 33; Cramer 2004, 214-216; Kayan - Vardar 2007, 14, 19.

⁸⁷ Radt 1997, 453-454; Cramer 2004, 214-215, 223; Pirson 2008, 45; Zimmermann 2011, 13.

⁸⁸ Cramer 2004, 215.

⁸⁹ Eriş 1996, 12-13.

⁹⁰ von Diest 1889, 11; Conze – Schuchhardt 1899, 148-151; Schuchhardt 1912, 71-72; Hansen 1971, 212; Stauber 1996a, 303-304; Pirson 2008, 45. Cramer (2004, 216-218), however, states that it has not yet been determined that Kozak marble was used in any ancient building in Pergamon.

⁹¹ Strab. 13.1.51. See also von Diest 1889, 12; Conze – Schuchhardt 1899, 148-149; Philippson 1910, 86; Hansen 1971, 212; Stauber 1996a, 290-291; Pirson 2008, 45, 49 n. 81. The mine between Atarneus and Pergamon, which Strabo (14.5.28) mentions as a source of wealth for the Lydian kings and Stauber (1996a, 290) hints about the possibility of being paired with this place, must be the Ovacık gold mine, which is still active on the coastal road between Dikili and Bergama, see Sommerey 2008, 164.

⁹² von Diest 1889, 10; Philippson 1910, 85; Schuchhardt 1912, 71; Hansen 1971, 212; Stauber 1996a, 333.

mentioned in ancient sources, considering its proximity to Kertonon and being on the Adramytteion-Pergamon road, it must have been operated in ancient times as well. The gold mines, which are active today, near both of the mentioned mines, suggest that gold was obtained from the region in antiquity⁹³. The ancient ruins in a thermal bath within the territory of Aşağıbey village to the west of Perperene prove that the thermal sources of the region were also used in the Roman and Byzantine periods⁹⁴.

Consequently, the fact that the earliest historical and archaeological evidence for the ancient settlements on the Kozak plateau, whose ancient name was probably Hippon, belong to the end of the 5th and 4th centuries BC indicates that the region gained prominence in this period. The emergence of urban settlements in the region in that period seems related to Mytilene's partial recovery of its peraia in 404 BC. Since Mytilene had now lost direct contact with the Ida Mountains, which had previously been its main source of material, it must have turned its attention to the Kozak plateau, just adjacent to its recovered peraia. The available historical evidence also implies that Mytilene had social and economic ties with the plateau from the end of the 5th century BC. The development of Pergamon, in the south of the plateau, as a royal capital and metropolis in the Hellenistic period caused the plateau to enter the political and economic sphere of Pergamene influence from since then. The routes passing over the Kozak plateau connected Adramytteion and the Mytilenaian Peraia to Pergamon. These routes were strategically important for both the coastal region and Pergamon, as well as valuable for reaching the rich agricultural and natural resources of the plateau. The presence of both an alluvial plain and forested lands on the plateau provided a significant amount of agricultural productivity and diversity. In addition to the grain, fruit and vegetables grown in the alluvial plain; the vineyards in the part of the mountains extending to the plateau and the wine produced accordingly; the timber, charcoal, acorns and game animals from the forests; the leather and dairy products obtained from the herds: and the horses constituted the main agricultural and natural wealth of the mountainous region. Gold, silver, copper and iron mines, granite, andesite and marble deposits, and thermal springs show how fertile the region was/is in terms of underground riches. Ultimately, extensive and interdisciplinary field studies on the ancient period of the Kozak plateau are necessary in order to provide more comprehensive data on the ancient routes, settlement patterns and socioeconomic structure in the region, and relations of the plateau with the lowland.

⁹³ Radt 1999, 284; Zimmermann 2011, 13.

⁹⁴ von Diest 1889, 12; Philippson 1910, 86; Schuchhardt 1912, 72; Stauber 1996a, 320.

Bibliography and Abbreviations

Ancient Literary Sources

Aristeid. hier. log.	Aristeides, hieroi logoi: Aelii Aristidis Smyrnaei Quae Supersunt Omnia II: <i>Orationes</i> XVII-LIII, ed. B. Keil, Berlin 1898, 376-467. Eng.: Aelius Aristides and the Sacred Tales, transl. C. A. Behr, Amsterdam 1968 = P. Aelius Aristides, the Complete Works II, transl. C. A. Behr, Leiden 1981, 278-353.
Athen. deipn.	Athenaios, Deipnosophistai: Athenaeus, The Deipnosophists I-VII, ed.and transl. C.B. Gulick, London 1927-1941.
Diosk. mat. med.	Dioskorides, de materia medica: Pediani Dioscuridis Anazarbei, de Materia Medica Libri Quinque, I-III, ed. M. Wellmann, Berlin 1907-1914. Eng.: Pedanius Dioscorides of Anazarbus, de materia medica, transl. L. Y. Beck, Hildesheim 2005.
Gal.	Claudii Galeni Opera Omnia, I-XX, ed. K. G. Kühn, Leipzig 1821-1833.
Hierokl. synekd.	Hierokles, synekdemos: Le Synekdèmos d'Hiéroklès et l'opuscule géographique de Georges de Chypre, ed. E. Honigmann, Bruxelles 1939.
Itin. Anton.	Itinerarium Antonini: Itineraria Romana I: Itineraria Antonini Augusti et Burdigalense, ed. O. Cuntz, Leipzig 1929, 1-85.
Ktesias	"Ktesias von Knidos", FGrH III C 1 no. 688, 416-517. Eng.: Ctesias on India and Fragments of His Minor Works, transl. A. Nichols, London 2011.
Not. episc.	Notitiae Episcopatuum: Notitiae Episcopatuum Ecclesiae Constantinopolitanae, ed. J. Darrouzès, Paris 1981.
Paus.	Pausanias, periegesis tes Hellados: Pausanias, Description of Greece, I-V, ed. and transl. W. H. S. Jones et al., London 1918-1935.
Plin. nat.	Plinius, naturalis historia: Pliny, Natural History, I-X, ed and transl. H. Rackham et al., London 1944-1962.
Ptol. geogr.	Ptolemaios, geographike hyphegesis: Claudii Ptolemaei Geographia, I-III, ed. K. F. A. Nobbe, Leipzig 1843-1845.
PsPlut. fluv.	Pseudo-Plutarch, peri potamon: Geographi Graeci Minores II, ed. K. Müller, Paris 1855, 637-665. Eng.: Pseudo-Plutarch, About Rivers and Mountains and Things Found in Them, transl. T. M. Banchich et al., New York 2010.
Souda	Suidae lexicon I-V, ed. A. Adler, München-Leipzig, 1994-2001.
Steph. Byz.	Stephanos Byzantios, ethnika: Stephani Byzantii ethnicorum quae supersunt, ed. A. Meineke, Berlin 1849.
Stob. anth.	Stobaios, anthologion: Ioannis Stobaei Anthologii Libri Duo Posteriores, I-III, ed. O. Hense, Berlin 1894-1912.
Strab.	Strabon, geographika: Strabo, Geography, I-VIII, ed. and transl. H. L. Jones, London, 1917-1932.
Tab. Peut.	Tabula Peutingeriana: Itineraria Romana: Römische Reisewege an der Hand der Tabula Peutingeriana, ed. K. Miller, Stuttgart 1916 = Die Peutingersche Tafel, ed. K. Miller, Stuttgart 1962.
Theophr. frg.	Theophrastos, fragmenta: Theophrasti Eresii Opera Quae Supersunt Omnia III: Fragmenta, ed. F. Wimmer, Leipzig 1862.

Theophr. h. plant	Theophrastos, peri phyton historias: Theophrastus, Enquiry into Plants, I-II, ed. and transl. A. Hort, London 1916.
Thuk.	Thukydides, historiai: Thucydides, History of the Peloponnesian War, I-IV, ed. and transl C. F. Smith, London 1919-1923.
Xen. an.	Xenophon, anabasis: Xenophon, Anabasis, ed. and transl. C. L. Brownson, London 1922.

Modern Bibliography

Barth – Stauber 1994	Barth, M. B. – J. Stauber, "Die Münzen von Perperene", Epigraphica Anatolica 23, 59-82.
Barrington 2000	Barrington Atlas of the Greek and Roman World: Map by Map Directory (ed. R. J. A. Talbert), Princeton.
Berlet 1913	Berlet, O., "Tafel 1: Die Pergamenische Landschaft" (ed. A. Conze et al), Altertümer von Pergamon I: Tafeln, Berlin.
BMC Mysia	A Catalogue of the Greek Coins in the British Museum: Mysia (ed. W. Worth), London 1892.
Braudel 1972	Braudel, F., The Mediterranean and the Mediterranean World in the Age of Philip II, 2. vols., transl. S. Reynolds, London.
Broughton 1959	Broughton, T. R. S., "Roman Asia Minor", An Economic Survey of Ancient Rome IV (ed. T. Frank), New Jersey, 505-949.
Carusi 2003	Carusi, C., Isole e Peree in Asia Minore: Contributi allo studio dei rapporti tra poleis insulari e territori continentali dipendenti, Pisa.
Clinkenbeard 1982	Clinkenbeard, B. G., "Lesbian Wine and Storage Amphoras a Progress Report on Identification", Hesperia 51/3, 248-268.
CMG	Corpus Medicorum Graecorum (cum Suppl.), Leipzig - Berlin.
Constantakopoulou 2007	Constantakopoulou, C., The Dance of the Islands: Insularity, Networks, the Athenian Empire and the Aegean World, Oxford.
Conze – Schuchhardt 1899	 O Conze, A. – Schuchhardt, C., "Die Arbeiten zu Pergamon 1886-1898", Mitteilungen des Deutschen Archäologischen Instituts Athenische Abteilung 24, 97-240.
Cramer 2004	Cramer, T., Multivariate Herkunftsanalyse von Marmor auf petrographischer und geochemischer Basis: Das Beispiel kleinasiatischer archaischer, hellenistischer und römischer Marmorobjekte der Berliner Antikensammlung und ihre Zuordnung zu mediterranen und anatolischen Marmorlagerstätten, PhD Thesis, Technisches Universität Berlin.
Darkot – Tuncel 1995	Darkot, B. – Tuncel, M., Ege Bölgesi Coğrafyası, İstanbul.
Duncan-Jones 1982	Duncan-Jones, R., The Economy of the Roman Empire: Quantitative Studies, 2nd ed., Cambridge.
During-Caspers 1986	During-Caspers, E. C. L., "Of Corals and Ailments in the Ancient Near East", Proceedings of the Seminar for Arabian Studies 16 [= Proceedings of the Nineteenth Seminar for Arabian Studies held at Oxford on 30th July - 1st August 1985], 25-31.

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Ellis-Evans 2019	Ellis-Evans, A., The Kingdom of Priam: Lesbos and the Troad between Anatolia and the Aegean, Oxford.
Eriş 1996	Eriş, E., Kozak, Bergama.
Fabricius 1886	Fabricius, E., "Eine Pergamenische Landstadt", Mitteilungen des Deutschen Archäologischen Instituts Athenische Abteilung 11, 1-14.
FGrH	Die Fragmente der griechischen Historiker (ed. F. Jacoby), Leiden 1923-1958.
Funke 1999	Funke, P., "Peraia: Einige Überlegungen zum Festlandbesitz griechischer Inselstaaten", Hellenistic Rhodes: Politics, Culture, and Society (eds. V. Gabrielsen et al.), Studies in Hellenistic Civilization 9, Aarhus, 55-75.
Hansen 1971	Hansen, E. V., The Attalids of Pergamon, 2nd ed., Ithaca.
Hepding 1910	Hepding, H., "Die Arbeiten zu Pergamon 1908-1909: II. Die Inschriften", Mitteilungen des Deutschen Archäologischen Instituts Athenische Abteilung 35, 401-493.
IG XII.2	Inscriptiones Graecae, XII: Inscriptiones insularum maris Aegaei praeter Delum 2; Inscriptiones Lesbi, Nesi, Tenedi (ed. A. R. Paton), Berlin, 1899.
I. Smyrna	Die Inschriften von Smyrna, I-II [IK 23-24], ed. G. Petzl, Bonn 1982-1990.
Kaufmann – Stauber 1994	Kaufmann, FM. – J. Stauber, "Perperene - Theodosiupolis", Epigraphica Anatolica 23, 41-58.
Kayan – Vardar 2007	Kayan, İ. – S. Vardar, "The Physical Geography of the Madra River Delta", The Madra River Delta: Regional Studies on the Aegean Coast of Turkey 1; Environment, Society and Community Life from Prehistory to the Present (eds. K. Lambrianides – N. Spencer), Ankara, 9-21.
Kiepert 1906	Kiepert, R., Karte von Kleinasien B1: Aivalyk, Berlin.
Külzer 2016a	Külzer, A., "Von Assos nach Pergamon und Ephesos: Betrachtungen zu den Straßen Westkleinasiens in römischer und byzantinischer Zeit", Assos: Neue Forschungsergebnisse zur Baugeschichte und Archäologie der südlichen Troas (ed. N. Arslan et al), AMS 78, Bonn, 185-204.
Külzer 2016b	Külzer, A., "Zwischen Europa und Asien: Zur Darstellung der thrakischen Chersones und des westlichen Kleinasien auf der Tabula Peutingeriana", Orbis Terrarum 14, 49-68.
Lipinski 2004	Lipinski, E., Itineraria Phoenicia, Leuven.
LSJ	Liddell, H. G. – R. Scott, A Greek–English Lexicon, rev. and augm. H. S. Jones (With a revised supplement), London 1996.
Ludwig 2020	Ludwig, B., "Reconstructing the Ancient Route Network in Pergamon's Surroundings", Land 9/8 241, 1-39.
Magie 1950	Magie, D., Roman Rule in Asia Minor to the end of Third Century after Christ, 2 vols., Princeton.
Miller 1916	Miller, K., Itineraria Romana: Römische Reisewege an der Hand der Tabula Peutingeriana, Stuttgart.
Miller 1962	Miller, K., Die Peutingersche Tafel, Stuttgart.
Nichols 2011	Nichols, A., Ctesias on India and Fragments of His Minor Works, London.

Pantera et al. 2018	Pantera, A. – A. Papadopoulos – V. P. Papanastasis, "Valonia Oak Agroforestry Systems in Greece: An Overview", Agroforestry Systems 92-4, 921-931.
Philippson 1910	Philippson, A., Reisen und Forschungen im westlichen Kleinasien I: Das westliche Mysien und die pergamenische Landschaft, Gotha.
Pirson 2008	Pirson, F., "Das Territorium der hellenistischen Residenzstadt Pergamon: Herrschaftlicher Anspruch als raumbezogene Strategie", Räume der Stadt: von der Antike bis heute (ed. C. Jöchner), Berlin, 27-50.
Radt 1997	Radt, W., "Antike und moderne Granitsteinbrüche im Kozakgebirge bei Pergamon/Bergama", IstMitt 47, 453-454.
Radt 1999	Radt, W., Pergamon: Geschichte und Bauten einer antiken Metropole, Darmstadt.
Rostovtzeff 1941	Rostovtzeff, M. I., The Social and Economic History of the Hellenistic World, 3 vols., Oxford.
Rubinstein 2004	Rubinstein, L., "Aiolis and South-western Mysia", An Inventory of Archaic and Classical Poleis: An Investigation Conducted by the Copenhagen Polis Centre for the Danish National Research Foundation (ed. M. H. Hansen – T. H. Nielsen), Oxford, 1033-1052.
Ruge 1934	Ruge, W., "Teuthras (9)", RE 5A/1, 1164.
Schuchhardt 1912	Schuchhardt, C., "Historische Topographie der Landschaft", Altertümer von Pergamon I/1: Stadt und Landschaft (ed. A. Conze et al.), Berlin, 61-143.
SEG	Supplementum Epigraphicum Graecum I – , ed. J. E. Hondius et al., Leiden-Amsterdam 1923 – .
Smith 1857	Smith, W., Dictionary of Greek and Roman Geography, Vol. 2: Iabadius – Zymethus, London.
SNG Cop.	Sylloge Nummorum Graecorum: Royal collection of coins and Medal, Danish National Museum, I-VII, [Reprinted] New Jersey 1981-1982.
SNG France 5	Sylloge Nummorum Graecorum: France 5; Département des Monnaies, médailles et antiques de la Bibliothèque nationale de France, Mysie, Paris 2001.
Sommerey 2008	Sommerey, K. M., "Die Chora von Pergamon: Studien zu Grenzen, Siedlungsstruktur und Wirtschaff", IstMitt 58, 135-170.
Stauber 1996a	Stauber, J., Die Bucht von Adramytteion I: Topographie (Lokalisierung antiker Orte / Fundstellen von Altertümern) [= IK 50], Bonn.
Stauber 1996b	Stauber, J., Die Bucht von Adramytteion II: Inschriften – literarische Testimonia – Münzen [= IK 51], Bonn.
Tozan 2017	Tozan, M., "Pergamon'un Yolları: Antikçağ'dan Bizans'a Bakırçay (Kaikos) Havzası'nın Yol Sistemi", Tarih İncelemeleri Dergisi 32/2, 531-563.
von Diest 1889	von Diest, W., Von Pergamon über den Dindymos zum Pontus, Gotha.
von Stackelberg 1882	von Stackelberg, O. M., Schilderung seines Lebens und seiner Reisen in Italien und Griechenland nach Tagebüchern und Briefen (ed. N. von Stackelberg), Heidelberg.
Zimmermann 2011	Zimmermann, M., Pergamon: Geschichte, Kultur, Archäologie, München.

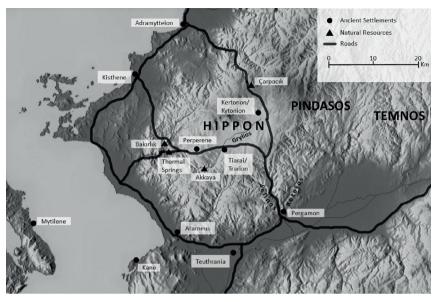


Fig. 1 Map of the Kozak plateau and its surroundings



Fig. 2 View of the plateau from SW (from Hisarköy)



Fig. 3 Roads around Pergamon in the Tabula Peutingeriana (after Miller 1962)



Fig. 4 Asar Tepe near Çamavlu from S



Fig. 5 Aegean Sea and Lesbos from the Perperenian Theater



Fig. 6 Granite blocks on the surface near Aşağıcuma village