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The Ephesian Silversmiths (Argyrokopoi) and the Mining Economy in Roman Asia Minor in the Context of Professional Associations

Ephesoslu Gümüşçüler (Argyrokopoi) ve Mesleki Dernekler Bağlamında Roma Anadolusu'nda Maden Ekonomisi

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ABSTRACT

Although the role of mining in Anatolian cities during the Roman period relies largely on Strabo's accounts, epigraphic documents provide quite detailed information about the mines and the economic groups they formed. Associations established by various craftsmen, particularly the argyrokopos (silversmith) and chalkeus (coppersmith), also demonstrate that craftsmen working in the mining industry acted collectively. Indeed, topos inscriptions identified in the public spaces of various cities such as Ephesus, Aphrodisias, Miletus, and Perge indicate that the precious metals obtained from these mines also conferred social status upon these groups within the social structure. In this study, topics such as the mines operated in Asia Minor during the Roman period, as mentioned in ancient sources and epigraphic documents, particularly Ephesus, which offers a rich array of examples, the methods of renting and operating these mines, and the role of metalworkers in the economic and public structures of cities are examined through a comparative approach.

Keywords: Mines, Argyrokopos, Chalkeus, Ephesus, Associations, Topos Inscriptions.

ÖZET

Madenciliğin Roma Dönemi Anadolu kentlerindeki yeri, büyük oranda Strabon'un anlatılarına dayanıyor olsa da epigrafik belgeler, madenlerin ve bu madenlerin oluşturduğu ekonomik gruplar hakkında oldukça detaylı bilgiler sunmaktadır. Argyrokopos (gümüş ustası) ve khalkeus (bakır ustası) başta olmak üzere çeşitli zanaatkarların kurduğu dernekler de maden işleyen ustaların birlikte hareket ettiklerini göstermektedir. Öyle ki Ephesos, Aphrodisias, Miletos, Perge gibi çeşitli kentlerin kamusal mekanlarında tespit edilen topos yazıtları, madenlerden elde edilen değerli metallerin söz konusu gruplara toplumsal yapıda statüler de sağladığını göstermektedir. Bu çalışmada, oldukça zengin örnekler sunan Ephesos başta olmak üzere antik kaynaklarda ve epigrafik belgelerde geçen, Anadolu'da Roma egemenliği boyunca işletilen madenler, bu madenlerin kiralanma ve işletilme biçimleri, kentlerin ekonomik ve kamusal yapılarında maden ustalarının yeri gibi konular karşılaştırmalı bir yaklaşımla ele alınmaktadır.

Anahtar Kelimeler: Madenler, Argyrokopos, Khalkeus, Ephesos, Dernekler, Topos Yazıtları.

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Introduction

In the financial systems of the ancient world, which were largely based on an agricultural and pastoral economy, the exploitation of highly profitable resources such as gold and silver mines and marble quarries was undoubtedly of vital importance. Although the widespread and controlled use of mines is generally considered to have begun in the Bronze Age, there was a significant increase in both the number of mines in operation and the number of related professional occupations during the Roman rule.[1]

The importance of mining as a major source of revenue in the Roman economy and the introduction of silver coins into circulation coincided with the conquests on the Iberian Peninsula and the provincialisation of the region during and following the Second Punic War (218–201 BC).[2] Pliny the elder describes the principal minerals of the Roman Empire as gold, silver, electrum, copper, precious stones, and metals and minerals also used as dye materials, and notes that they were the subject of great interest.[3] It is well known that the expansionist policy of the Roman state was driven in large part by the need to access mining resources. It has been established that during the Roman Empire, metals such as silver, lead and copper were extensively mined and processed, and that the smelting processes involved caused levels of atmospheric pollution so high that they were not reached in the Northern Hemisphere until the 18th century, that is, the Industrial Revolution.[4] Lead pollution, in particular, sheds light on intensive silver production and its use, particularly in the form of coins, whilst the equally high levels of copper production demonstrate just how continuous and widespread the minting of bronze coins was.[5] Similarly, hydraulic mining techniques, which involve the use of water in the extraction and processing of mineral ores, continued to be widely used until the Industrial Revolution.[6]

Thus, in addition to basic economic activities such as agriculture, livestock farming and trade, mining was also one of the main financial sources of the Roman state. The mines located in Rome's western provinces, such as Lusitania, Baetica, Gaul and Pannonia, are also well documented thanks to archaeological and epigraphic evidence. In contrast, the economic impact of mines in Rome's eastern provinces, particularly those in Asia Minor, on the region and neighbouring cities, the nature of the occupational groups associated with these mines, and the role of these groups in social and administrative life have largely been overlooked. The aim of this paper is to evaluate, from a comparative perspective, how mines of gold, silver, copper and other ores may have been operated in the cities of Asia Minor during the Roman period, and in which cities the professional associations involved in mining or trading these ores were concentrated.

Miners and the operation of mines

The main ancient source providing detailed information on the operation of mines in Asia Minor is Strabo's *Geographika*. Strabo notes that a mine producing sulphurous red arsenic was operated on Mount Sandaracurgium/ Sandarakourgion in Paphlagonia, but that convicts were employed to extract this toxic ore.[7] He also provides the following explanation regarding the structure and operation of the mine:

> "*Mt. Sandaracurgium is hollowed out in consequence of the mining done there, since the workmen have excavated great cavities beneath it. The mine used to be worked by publicans, who used as miners the slaves sold in the market because of their crimes; for, in addition to the painfulness of the work, they say that the air in the mines is both deadly and hard to endure on account of the grievous odour of the ore, so that the workmen are doomed to a*

1 For information on mines in Asia Minor and their processing during the pre-Roman period, see Ergun Kaptan, "Findings Related to the History of Mining in Turkey", *MTA Dergisi* 111 (1990): 75-84; Joseph W. Lehner and K. Aslıhan Yener, "Organization and Specialization of Early Mining and Metal Technologies in Anatolia", *Archaeometallurgy in Global Perspective*, B. Roberts, C. Thornton (ed.), (New York: Springer, 2014), 529-557; Prentiss De Jesus and Gonca Dardeniz, "Antik Madencilik Hakkında Arkeolojik ve Jeolojik Görüşler", *MTA Dergisi* 151 (2015): 235-250.

2 See Helmuth Schneider, "Innovationen und wirtschaftliche Entwicklung im Imperium Romanum", *Gephyra* 17 (2019): 206.

3 Plin. *NH*. 33.1.

4 In this regard, the groundbreaking study conducted by Sungmin Hong, Jean-Pierre Candelone, Clair C. Patterson and Claude F. Boutron in Greenland has identified the periods during which copper smelting processes were most intense. See, Sungmin Hong *et al.*, "History of Ancient Copper Smelting Pollution During Roman and Medieval Times Recorded in Greenland Ice", *Science* 272 (5259) (1996): 246-249.

5 Elio Lo Cascio, "Il denarius e gli scambi intermediterranei", *Moneta, mercanti, banchieri. I precedenti greci e romani dell'Euro (Atti del convegno internazionale, Cividale del Friuli, 26-28 settembre 2002)*, G. Urso (ed.), (Pisa: Edizioni ETS, 2003), 147-148.

6 Andrew Wilson, "Machines, Power, and the Ancient Economy", *Journal of Roman Studies* 92 (2002): 31-32.

7 John Thornton, "Publicani, kakourgia e commercio degli schiavi. Per una nuova interpretazione di Strabone XII 3,40", *MediterrAnt* 4 (2001): 358-359.

> *quick death. What is more, the mine is often left idle because of the unprofitableness of it, since the workmen are not only more than two hundred in number, but are continually spent by disease and death.*"[8]

P. de Jesus states that the strong smell described here is arsenic fumes resulting from the ore smelting processes at the mine, and that, due to the high arsenic content in the slag produced from silver, the mountain in question could be Mount İnegöl near Amasya/ Gümüşhacıköy. Since a lead-arsenic mine and smelting complex dating back to the Roman period has been identified here, it is believed that lead, galena, or iron ore may have been extracted from the mountain.[9] On the other hand, L. Summerer suggests that the mine mentioned by Strabo should be sought in the village of Çayağzı, near Sinop/ Durağan.[10]

It is known that miners under the personal patronage of Archelaus of Cappadocia, who was one of Rome's allied client kings, explored metal and stone mines in Cappadocia and Galatia, and that there exists a work on these mines to which Pliny the Elder also refers.[11] Since the existence of mines operated and managed entirely under state control has not yet been identified in Roman provinces in Asia Minor, it is understood that the labour for these mines was widely provided through the punishment of "condemnation to the mines" (*damnatio ad metalla*).[12] Not only is this method of punishment not reserved solely for serious offenders such as murderers, but it is also known that those found to have committed various administrative and financial offences are also subject to such punishments. In the letters of Pliny, who was assigned as the Governor of *Pontus et Bithynia* in AD 110, there are also references to figures such as Flavius Archippus of Prusa, who was punished with *ad metalla* for the crime of counterfeiting.[13] However, there are also cases where both free people and slaves were sent to *metallum* due to their different statuses.[14] In particular, it is known that in mines directly under the emperor's authority or operated by the state, a wide range of groups, including soldiers, workers, *coloni* and prisoners, were employed.[15]

The fact that there were free workers from Asia Minor among the *familia Caesaris* (imperial household/ officials) brought to Egypt to work in the mines at *Mons Claudianus* also demonstrates that a specialised labour force and officials directly attached to the emperor were able to be transferred between different regions of the empire to carry out their duties.[16] Similarly, the Turdetani, an indigenous people of Baetica who had mastered the art of excavating winding, deep tunnels and draining groundwater using the Egyptian screw (*Archimedes' screw*), serve as a concrete example of both the application of mining technology within the empire and the extent to which the local labour force had specialised in key economic areas.[17]

It is clearly evident from ancient sources that the mines and quarries where individuals of the status of "slaves condemned to labour" (*servus poenae*) worked were economic enterprises leased from the state and operated by Roman *publicanii* or *conductores* until the Roman imperial period. In addition to Strabo's accounts, Pliny the Elder also mentions that the Salutarensia mines in Baetica were leased for annual operation at a rent of 255,000 *denarii*, and the Antonius mine at 400,000 *sestertii*.[18]

8 Strab. 12.3.40.

9 Prentiss De Jesus, "Metallurgical Practices in Early Anatolia", *MTA Dergisi* 87 (1976): 60.

10 Latife Summerer, "Revisiting Strabo 12. 3. 40: Along the Amnias Valley toward Pompeiopolis, Pimolisa and Sandaracurgium", *Geographia Antiqua* 27 (2019): 117-118.

11 Strab. 12.2.10; Plin. *NH*. 37.46.

12 According to the jurist Ulpianus, the punishment of *metalla* is not imposed in all provinces, and those sentenced to this punishment by the provincial governors are transferred to the places where *metalla* is carried out to serve their sentences there. *Digest*. 7.1.9.2–3; Alfred M. Hirt, *Imperial Mines and Quarries in the Roman World*, (New York: Oxford University Press, 2010), 50–51; for a legal analysis of the punishment of *metalla*, see Mark Gustafson "Condemnation to the Mines in the Later Roman Empire", *The Harvard Theological Review*, 87/ 4 (1994): 421-433.

13 Plin. *epist*. X.58.

14 Fergus Millar, "Condemnation to Hard Labour in the Roman Empire, from the Julio-Claudians to Constantine", *Papers of the British School at Rome* 52 (1984): 129.

15 Hans J. Drexhage et al., *Die Wirtschaft des Römischen Reiches (1.-3. Jahrhundert)*, (Berlin: Akademie Verlag, 2002), 223; See also, Markus Scholz, "Roman army and mining*", Supplying the Roman Empire (LIMES XXV volume 4). Proceedings of the 25th International Congress of Roman Frontier Studies 4*, H. Van Enckevort et al. (ed.), (Leiden: Sidestone Press, 2024), 145-153.

16 Hirt, *Imperial Mines and Quarries*, 336.

17 Strab. 3.2.9.

18 Plin. *NH*. 34.164. Pliny's accounts shed light on the importance of the mining economy within the Roman financial system.

Similarly, the mining law/regulations known as *Lex Metalli Vipascensis,* in Lusitania, which demonstrate that mining operations were not entirely under state monopoly even in the 2nd century AD, shed light on the existence of a highly professional structure in the mining sector that involved numerous groups.[19] During the reign of Emperor Tiberius (14-37 AD), Sextus Marius, known as the *ditissimus Hispaniarum* (the wealthiest man in Hispania), is known to have been a major landowner and to have controlled gold and silver mines.[20] Marius's wealth, acquired through the mines, paved the way for him to become quite renowned, to the extent that one of the most significant mountains in Hispania was named *Mons Marianus*.[21] However, the enormous wealth of Sextus Marius also made him a target of the empire. As is evident from the trial of Marius, which is also mentioned by the ancient historians Tacitus and Cassius Dio, it is known that the Roman Empire seized its gold and silver mines through confiscation.[22] Similarly, during the Roman Republic, although the operation of gold and silver mines by local authorities was prohibited during the process of Macedonia's provincialisation under Lucius Aemilius Paullus, the mining of iron and copper was permitted at a lower tax rate than in the previous period.[23] It is clear that, in order to maintain the strength and stability of Rome's financial system, it was deemed desirable for gold and silver mines to be operated under state/ or imperial control and, where possible, under state ownership.

Unlike the western provinces of Roman Empire, there is no evidence yet regarding the state monopolization of mines in Asia Minor or the presence of imperial officials, such as *procurator metallorum*, who directly oversaw the mining districts (*fines*, *territoria metallorum*).[24] Indeed, there are known instances of individuals from various cities in Asia Minor holding mining-related offices in western provinces. An inscription at Pergamon indicates that Saturnunis, a freedman who held a number of official positions, also served as *procurator metallorum Vipascensium* (administrator of the Vipasca Mines) in the province of Lusitania during his career.[25] Another inscription of a similar nature at Ephesus indicates that Titus Claudius Xenophon held the office of *proc(urator) argentariarum Pannoniarum et Dalmatiarum*.[26] However, inscriptions from Miletus, Ephesus, Tralleis and Mylasa dating from the 1st century AD document that, although the exact extent of his jurisdiction is unknown, the quarries and marble deposits in Asia Minor were under the supervision of the *procurator a marmoribus/lapicidinarum* during certain periods.[27]

In contrast to the business and professional companies that carried out mining operations in the western provinces such as Baetica, Lusitania, Noricum, Moesia, Dacia and so on, it appears that mining operations in Asia Minor were dominated by unknown entrepreneurs or local companies.[28] The statement by the jurist Gaius that operators of gold, silver and salt mines were legally permitted to establish investment partnerships known as *corpora* suggests that some mining sites in Asia Minor may also have been operated using this method.[29]

In this regard, the inscription known as the *Lex Portorii Asiae* or the Ephesus Customs Law contains noteworthy information concerning mining operations in Asia Minor, import and export activities, and the rights and responsibilities of those holding the right to operate as concessionaires:

19 https://droitromain.univ-grenoble-alpes.fr/Negotia/Metallis1_Girard.htm (Access date: 21.02.2026); Sergio Lazzarini, *Lex metallis dicta*. *Studi sulla seconda tavola di Vipasca*, (Rome: L'Erma di Bretschneider, 2001).

20 According to Tacitus, Sextus Marius was tried for corruption, sentenced to death, and executed by being thrown from the Tarpeian Rock: "To leave no doubt that Marius's immense wealth had led to his corruption, Tiberius transferred the gold and copper mines confiscated by the state directly into his own possession." Tac. *Ann*. 6.19.1. trans. by J. Jackson.

21 Edward Champlin, "The Richest Man in Spain", *ZPE* 196 (2015): 278.

22 Tac. *Ann*. 6.19.1; According to Cassius Dio's account, the accusation that Sextus Marius had engaged in an illicit relationship was fabricated by Emperor Tiberius. Cass. Dio. 58.22.3; See also Drexhage *et al*., *Die Wirtschaft*, 222.

23 Liv. 45.29.

24 According to C. Brunn, although there were procurators directly involved in mining operations in many provinces from Hispania to Dacia, private individuals continued to control smaller-scale mines. Christer Brunn, "Adlectus Amicus Consiliarius" and a Freedman "Proc. Metallorum et Praediorum": *News on Roman Imperial Administration, Phoenix* 55/ 3/4 (2001): 356.

25 Michel Christol and Ségolène Demougin, "De Lugo à Pergame : la carrière de l'affranchi Saturninus dans l'administration impériale", *Mélanges de l'École française de Rome. Antiquité*, 102/ 1 (1990): 169ff; Michel Christol, "Un aspect de l'administration impériale: le procurateur des mines de Vipasca", *Pallas* 50/Mélanges C. Domergue 2 (1999): 237-244.

26 For the inscription in Ephesus belonging to Titus Claudius Xenophon, who was in charge of the mines in Pannonia and Dalmatia, see *I. Ephesos* 652.

27 See Peter Herrmann, "Chresimos, procurator lapidicinarum. Zur Verwaltung der kaiserlichen Steinbrüche in der Provinz Asia", *Tyche* 3, (1988): 119-128; Hirt, *Imperial Mines and Quarries*, 115-117.

28 Hirt, *Imperial Mines and Quarries*, 48-82.

29 *Dig*. III. 4.1= Gaius, *ad Edictum Provinciale,* Lib. III.

> *Whatever ore is exported from Asia to Rome according to the lex on mining, on this ore and on the vessels in which it is contained, they are to [give the collector] four asses per hundred pounds; more in telos is not to be owed on these things. If anyone in contravention of these provisions [holds up these vessels] with wrongful deceit, so that the ore is not transported, then the collector is to be liable to the shipper for double the amount which has been held up [and] there is to be the right to seizure of a pledge in this [matter] to the partners who have accepted the contract for the mine.*[30]

The minerals and metallurgical products extracted from Asia Minor and apparently circulated by individuals are also clearly mentioned in this inscription: gold, silver, copper, iron, lead, and stones or rocks mined to produce a gold-copper alloy.[31] Theophrastus, one of the principal sources on stones and minerals, mentions that almost every kind of stone and mineral can be found near Tmolus.[32] He also notes that large quantities of lead oxide ore were mined in Cappadocia, but that this caused poisoning among the miners.[33]

It states that this type of ore, known as *Sinopic*, was actually mined in Cappadocia but was given this name because it was distributed via the port city of Sinope. This fact can also be found in the accounts of Strabo.[34] According to Strabo, the gold mines at Astyra near Troas,[35] the mines on Mt. Tmolus that brought wealth to the Lydians, and gold dust flowing into the Pactolus River,[36] as well as the gold mine near Pergamon, had by his time already been exhausted.[37]

Some inscriptions also provide indirect information regarding the locations of mines. In this context, C. P. Jones suggests, based on an inscription found at Tralleis, that the association named "*koinon* of the residents of Siderous/ Sidarous" founded by workers at the neighbouring settlement of Siderous, was likely an association of miners.[38] A letter sent to Aphrodisias during the reign of Emperor Hadrian (117–138) also provides noteworthy information regarding mines and mining taxes. The letter indicates that in the province of Asia (or specifically in the city of Aphrodisias), there were restrictions on the use of iron, and that a special tax, referred to as a "nail tax", was collected under the supervision of the *procurator* Claudius Agrippinus.[39] Both this letter and the epigraphic documents discovered in the city suggest that, as Aphrodisias and its surroundings had various iron mines, the city may also have been exempt from the iron tax due to its special status.[40]

Although it is quite difficult to determine exactly which groups were responsible for the various stages involved in extracting and smelting mines in Anatolia to make the ore ready for use, ancient sources and epigraphic records provide valuable insights into the mining economy and the networks associated with it. In this sense, mines constituted an important resource within the craft and trade network of the coastal and inland towns of Western Asia Minor.

Argyrokopoi of Ephesus as a Historical Figure

In the 1st century AD, the silver industry (coinage, silversmithing, silver trade, banking, etc.) constituted a significant branch of craftsmanship and trade in many cities of Asia Minor.[41] A vivid example of this can also be

30 *Monumentum Ephesenum* II. 78–81, trans.by M. Cottier *et al*. "Text and Translations", M Cottier, et al. (ed.), *The Customs Law of Asia* (Oxford: Oxford University Press 2008), 57-49; See also Burak Takmer, "Anadolu'nun Önemli Tarihi Yazıtları 4. Lex Portorii Provinciae Asiae (Asia Eyaleti Gümrük Yasası)", *Eskiçağ Yazıları* 4, Nalan E. Akyürek Şahin *et al*. (ed.), (İstanbul: Arkeoloji ve Sanat Yayınları, 2013), 164; Seth G. Bernard, "Ballast, Mining, and Stone Cargoes in the "Lex portorii Asiae"", *ZPE* 191 (2014): 182-184.

31 *Monumentum Ephesenum* II. 66-67.

32 Theop. *De lapidibus* 47.

33 Theop. *De lapidibus* 52.

34 See for Sinopean ruddle and miners of Archelaus, Strab. 12.2.10.

35 Strab. 13.1.23.

36 Strab. 13.4.5.

37 Strab. 14.5.28.

38 Christopher P. Jones, "An Inscription Seen by Agathias", *ZPE* 179 (2011): 107-115; Jones, Christopher P., "Correction to 'An Inscription Seen by Agathias' (ZPE 179 [2011] 107-115)", *ZPE* 180 (2012): 126; http://www.philipharland.com/greco-roman-associations/?p=24842 (Access date: 21.02.2026).

39 Joyce M. Reynolds, *Aphrodisias and Rome* (Journal of Roman Studies Monographs No. I), (London: The Society for the Promotion of Roman Studies, 1982): 115-118, No. 15, Pl. 10; *SEG* 33, 855.

40 C. Kokkina states that the inscription (κωλύει ὁ τόπος τού σιδήρου την δέσιν ΕΠΙ. (*MAMA* VIII 430)) should be interpreted as a tax exemption. See, Christina Kokkinia, "Making Sense of an Odd Inscription: MAMA VIII, 430 and the 'Nail Tax.'" *ZPE* 151 (2005): 259-262.

41 Ephesos: *I. Ephesos* 425, 547, 586; Miletopolis (Mysia): *I.Miletupolis* 125; Nikaia: *I.Mus. Iznik* 1257; Prusias ad Hypium: *I.Prusias* 89.

seen in Paul's visit to the city of Ephesus.[42] In the *Book of Acts* (19.23-41) in the New Testament, the disturbance that occurred when Paul arrived in the city involving the silversmiths (*argyrokopoi*) is described as follows:

> *At that time, a major disturbance broke out because of the new teachings. A silversmith named Demetrius, who made silver shrines for the goddess Artemis, was bringing in a lot of business for his fellow craftsmen. He gathered them together with other workers in the same trade and said, "Men, you know that we make a good living from this business. But you can see and hear that this man, Paul, has convinced and turned away many people, not only in Ephesus, but throughout almost all of Asia, by claiming that gods made by human hands are not real gods. This poses a threat not only to our livelihood but also to the reputation of the great goddess Artemis. There is a risk that her temple will be disrespected and that her majesty, which all of Asia and the world worship, will be lost". When they heard this, they became furious and started shouting, "Great is Artemis of the Ephesians!" The whole city fell into chaos. The crowd rushed together into the theater, dragging with them Gaius and Aristarchus, Macedonians who were Paul's travel companions.*[43]

This account of the riot does not merely reflect a conflict between religious groups; it also demonstrates how various temples and cult centers, as seen in the example of the Artemis Cult of Ephesus, provided significant economic contributions to the groups engaged in the production of religious items, such as votive offerings.[44] S. Karwiese, noting that silver was a valuable metal, points out that the products described here as "silver temples" are not actually objects but rather temple-depicted coins, known as *kistophoros*, and suggests that Demetrius, their leader, may have been the mint master responsible for minting silver coins.[45]

From this perspective, the cult of Artemis was not merely a religious element for Ephesus but also served an important economic function for the groups conducting business around the temple. Thus, it appears that certain temples, such as the Temple of Artemis, may have supported not only vendors of votive offerings but also the artisans who produced them.[46] J. Poblome states that when planning production phases related to craftsmanship, which are intertwined with economic and social networks, three fundamental elements are taken into consideration: the "entrepreneur," the "craftsman," and the "customer".[47] The processing and sale of minerals, which were evidently extracted under the supervision of concessionaires using slave and hired labour, also integrated various craftsmen and professional associations. From this perspective, the mining economy represented a vital economic network for urban centers.

The silversmiths of Ephesus and their apparent leader, Demetrius, offer significant insight into the formation and collective action of such professional organizations. Epigraphic evidence from the city indicates that the silversmiths formed a highly organized structure and played an active role in urban life.

In a funerary inscription dating to the reign of Emperor Claudius (AD 41–54), it is stated that a silversmith named M. Antonius Hermeias, who also served as a *neopoios* for the Artemision of Ephesus, stipulated that a penalty of 1,000 *denarii* would be paid to the silversmiths of Ephesus should the inscription on his tomb be

42 Onno M. Van Nijf, *The Civic World of Professional Associations in the Roman East*, (Amsterdam: J. C. Gieben, 1997) 238. Ephesus is a settlement that stands out for its large number of professional associations. For a comprehensive study on this topic, see Yadigar Doğan, "Yazıtlar Işığında Ephesos Esnaf ve Zanaatkâr Dernekleri", *Eskiçağ Yazıları 7 -Akron* 9, N. E. Akyürek Şahin – M. E. Yıldız – H. Uzunoğlu (ed.), (İstanbul: Arkeoloji ve Sanat Yayınları, 2015), 121-156.

43 *NT*, Acts, 19.23-29. trans. by A. Barnes.

44 For the regional and supra-regional significance of the Temple of Artemis at Ephesus, see Richard Oster, "The Ephesian Artemis as an Opponent of Early Christianity," *JAC* 19 (1976): 30ff; Ulrike Muss, "The Artemision of Ephesos in the Imperial Period", *Ephesos as a Religious Center under the Principate*, A. C. Black *et al*. (ed.), (Tübingen: Mohr Siebeck, 2022), 69-94.

45 Stefan Karwiese, "Δημήτριος...ἀργυροκόπος ποιῶν ναοὺς ἀργυροῦς Ἀρτέμιδος: Die Silbertempel des Demetrios und die „Kistophoren" des Claudius I (Ein Vorschlag)", *Gephyra* 16 (2018): 20-22.

46 Andrew Wilson, "Introduction: Religion and the Roman Economy", *The Economy of Roman Religion*, A. Wilson – N. Ray – A. Trentacoste (ed.), (Oxford: Oxford University Press, 2023), 13.

47 Jerome Poblome, "Ex oriente lux A panorama of craft studies in the Roman East", *Zeitschrift für schweizerische Archäologie und Kunstgeschichte*, 65/ 1-2 (2008): 80.

erased or should anyone other than Hermeias himself and his wife be interred in the tomb.[48] Furthermore, the responsibility for maintaining the tomb was entrusted to the silversmiths' association, defined as a *synedrion*.[49]

It is evident that by the early 1st century AD, the silversmiths' associations in Ephesus had secured both a common treasury to sustain their operations and a recognized status within the urban life. O. M. Van Nijf notes that, based on the events in the Demetrios narrative, this group also has a place in the theater where they can perform.[50] Furthermore, the fact that a silversmith such as M. Antonius Hermeias held a position associated with the Temple of Artemis corroborates the narrative recounted in the Bible. It follows that he and the members of the *synedrion* to which he belonged must have been individuals of considerable wealth who specialized in the production of silver temple artifacts. It is also known that during the same period, silversmiths and goldsmiths (*chrysochooi*) in the neighboring city of Smyrna were organized as *synergesia*.[51] The fact that members of the *synergesia* in Smyrna restored the statue of Athena and returned it to the city is another noteworthy example that demonstrates both this group's connection to the cult of Athena in the city and its economic power.[52]

An honorary inscription discovered at the Varius Baths in Ephesus also states that an *archiereus* named Tiberius Claudius Aristion was honored by the silversmiths of Ephesus.[53] Another inscription, dedicated to the Artemis of Ephesus, Emperor Antoninus Pius (138–161), and the silversmiths by a person named Marcus (whose full name is illegible), serves as further evidence of the vibrant relationship between the Artemis cult and the silversmiths in the city.[54]

Another honorary inscription dated to the early 3rd century AD, the *prostates* of the silversmiths' association, who describe themselves as the "sacred *synedrion* of the silversmiths of Ephesus", are recorded as having honored Claudius Ac(h)ilius Iulius.[55] In another honorary inscription dated to the mid-3rd century, the silversmiths (*argyrochooi*) of Ephesus honored the proconsul Valerius Festus, whom they described as a benefactor and their savior, (Phestos) with the words "*serving Ephesus as a hero did in the time of Antoninus, making the city's harbor even larger than it was in the time of Croesus*" and a statue.[56]

Additionally, the mention of ἀργυροκόπων (silversmiths) on two different columns along the Arkadiane/Harbor Street in Ephesus indicates that this group had stalls or shops along that route.[57] The presence of silversmiths along the harbor-temple route suggests that this group chose these areas to sell cult objects to pilgrims visiting Artemis.[58]

Associations, Patronage and Urban Landscape

Craftsmen working with metal, mint masters, or miners and the professional associations they formed are evident not only in the city of Ephesus but also in the socio-economic structure of many other cities in Asia Minor. Just as archaeological finds can be discovered in nearly every city, epigraphic records also frequently refer to those engaged in metalworking. However, inscriptions referring to metalworkers, such as *argyrochooi, argyrokopoi, chalkeis*, and others, are numerically dominated by examples from the city of Ephesus. Both the prosperity of the city's occupational groups and the role of metal products in urban life (due to their use for both luxury and basic materials) are undoubtedly the primary reasons for this distinction. In Ephesus, as many *chalkeis* (copperworkers or bronze coin masters) have been identified as there are *argyrokopoi*. In addition

48 For *neopoios*, see Vera Hofmann, "Neue Inschriften zum Artemision von Ephesos III: Neopoioi-Inschriften", *Philia* 8 (2022): 79-87.

49 *I.Ephesos* 2212. The expression "the *synedrion* of the silversmiths" can also be seen in another inscription in the city. *I.Ephesos* 2441. Additionally, another definition as "the *plethos* of the silversmiths" has been identified. *I.Ephesos* 585. Given these parallels, G. M. Rogers also suggests that Demetrius, like Hermeias, may also have served as a *neopoios*, see Guy M. Rogers, "Demetrios of Ephesos: Silversmith and Neopoios?", *Belleten* 50/198 (1986): 877-883.

50 Van Nijf, *The Civic World of Professional Associations*, 146.

51 *I.Smyrna* 721; Van Nijf, *The Civic World of Professional Associations*, 146; http://www.philipharland.com/greco-roman-associations/?p=1395 (Access Date: 12.02.2026); http://ancientassociations.ku.dk/assoc/1139 (Access Date: 12.02.2026).

52 For information on the Temple of Athena and its cult in Smyrna, see Cook - Nicholls 1998.

53 It is understood that Tiberius Claudius Aristion, who was also a prominent benefactor in the city of Ephesus, had close ties with silversmiths in the city. See *I.Ephesos* 425.

54 *I.Ephesos* 586

55 *I.Ephesos* 636.

56 *I.Ephesos* 1377; *SEG* 34, 1094; Van Nijf, *The Civic World of Professional Associations*, 85-86.

57 *I.Ephesos* 547.1-2; *AGRW* 9734.

58 Van Nijf, *The Civic World of Professional Associations*, 85-86.

to the daily use of copper in the city, it is known that bronze was used to create cult statues or various objects, which undoubtedly indicates a significant use of copper as well.[59]

The relationships between these groups and local elites or professional associations also provide insight into their roles and positions in urban life. One of the most striking examples comes from the city of Miletus. In the *cavea* of the Miletus theater, there are inscriptions likely dating to the early Late Antique period that identify the groups supporting the teams in the plays: "*Venetoi* (the Blues) supporters, the goldsmiths (αὐραρίων βενέτω(ν))," "the goldsmiths (αὐραρίω(ν))," "goldsmiths singing victory songs (ἐπινικίων αὐραρίων)," and "goldsmiths who love the emperor (φιλαγούστου| αὐραρίον)", are known to have occupied four distinct seats.[60] These *topos* inscriptions found on the seating rows undoubtedly also serve as an indicator of status in the public sphere. The goldsmiths-money changers in Miletus, defined by the term αὐραρίων derived from the Latin *aurarius*, also possess, in this sense, a visibility and influence comparable to, and even institutionally superior to, the silversmiths in Ephesus. In the theater at Aphrodisias, two distinct locations were also allocated to goldsmiths.[61] C. Rouché suggests that these groups, led by the *protaurarios*, may have been gold merchants rather than gold-working craftsmen.[62] Inscriptions indicating that spaces were allocated for the shops of gold and silver craftsmen have also been identified in the external vaults attached to the stadion in Perge.[63]

It appears that in Alexandria Troas, the coppersmiths were also organized under an association called *symbiosis*. The coppersmiths' association was designated as the entity to collect the fine to be paid if a sarcophagus commissioned by an unnamed individual for himself and his family were used by others.[64] An honorary inscription discovered in Nicaea, Bithynia, indicates that the *chalkeis* were among the city's respected economic groups and that T. Flavius, who held important positions such as *archiereus, timetes, proegoros*, and *Asiarches*, indicates that the city's *chalkeis* were also financially supported.[65]

In the city of Thyateira as well, a man named Marcus Antonius Galates, son of Marcus, was honored by the coppersmiths, likely due to his philanthropic activities or close ties to the association.[66] In Saittai, another craftsman and merchant town in the region, it is understood that the copperworkers' association (*synergesia*), which had a relatively weak socio-economic role and functioned as a kind of funeral society, supported the burial expenses of its own members and, in this context, also funded the tomb of a craftsman named Prepon in the early 3rd century.[67]

The funerary inscription of Aurelius Zotikos, son of Epikrates, dated to the 3rd century and discovered in Hierapolis, indicates that miners and metalworkers in this city were active in several craft trades and that the individual in question was authorized to conduct annual funeral rites.[68] The presence of two distinct groups, the *helokopoi*, a group of artisans associated with nail-making blacksmiths serving the city, and those directly identified as *chalkeis*, demonstrates the extent of occupational specialization in this context.

Conclusion

Although the historical and economic importance of the silversmiths in the cities of Roman Asia Minor is not sufficiently understood, epigraphic sources indicate that in cities where groups of silversmiths, whether engaged in craftsmanship or trade, organized themselves around a professional association, they generally

59 *SEG* 34, 1124.

60 Charlotte Roueché, "Aurarii in the Auditorium", *ZPE* 105 (1995): 38; Richard Ascough, "Carving Out Public Space: τόπος Inscriptions and Early Christ Groups", *Epigraphik und Neues Testament*, J. Verheyden – M. Öhler – Th. Corsten (ed.), (Tübingen: Mohr Siebeck, 2015), 99, fn. 35.

61 *I.Aphrodisias* 10.21; 10.33.

62 Roueché, "Aurarii in the Auditorium", 43. For the *prototaurarios* at Aphrodisias, see *I.Aphrodisias* 8; inscriptions dating to the Late Antique/Byzantine period are also known from Corycus in Cilicia, suggesting that goldsmiths there may have been organized under the leadership of a *prototaurarios*. *MAMA* III 335; III 607.

63 See *I.Perge* 476.

64 *I.Alexandreia Troas* 122. Carola Zimmermann, *Handwerkervereine Im Griechischen Osten Des Imperium Romanum*, Monographien Des RGZM 57. (Mainz: Verlag d. Römisch-Germanischen Zentralmuseums, 2002), 40.

65 *I.Mus.Iznik* 73, l.6.

66 *TAM* V, 2, 936.

67 Malay, *Lydia Mysia Aiolis* 115; See http://www.philipharland.com/greco-roman-associations/?p=12263 (Access date: 06.03.2026)

68 *I.Hierapolis Judeich* 133; http://www.philipharland.com/greco-roman-associations/?p=1241 (Access date: 06. 03. 2026); http://ancientassociations.ku.dk/assoc/167 (Access date: 06. 03. 2026).

enjoyed a high social status. Examples illustrating the public and economic power of these groups include the organized uprising of silversmiths against Christians led by Paul in Ephesus in the 1st century AD, and the repair of the statue of Athena by silversmiths and goldsmiths from Smyrna at their own expense. Similarly, the seating arrangements in the theaters of Aphrodisias, Perge, and Miletus, the shops adjacent to the Perge Stadion, and the allocation of shops along the harbor street in Ephesus also clearly demonstrate the place of gold, silver, and copper smiths within the urban landscape.

When examining the distribution of professional associations related to mining, it is noteworthy that many cities, from Aphrodisias to Smyrna, are located near Mount Tmolus and the Maiandros Valley. In particular, it can be stated that the area around Tmolus hosted significant mines, and as a result, the surrounding cities also formed economic groups associated with these mines. However, despite Strabo's detailed descriptions, no mining territories (*territoria metallorum*) or mining companies are known to have existed on Mount Sandaracurgium in Paphlagonia or in the vicinity of Mount Tmolus, as referenced in epigraphic documents. The provisions in the *Lex Portorii Asiae* regarding mineral ores to be sent from Asia Minor to Rome indicate that mining operations certainly existed in Asia Minor, but that these operations were run by concessionaires.

The mines, understood to be operated by concessionaires, were integrated into the economic structure of the cities through the artisans and merchants who processed the ore and the associations they established. While the funerary function of many other associations in Asia Minor is prominent, it is evident that the economy always took center stage as the unifying factor in mining-related associations. The associations in the cities of Ephesus, Thyateira, and Nicaea were also supported by the local elites through patronage and philanthropic activities. The *argyrokopoi* in Ephesus achieved a reputation that extended across the empire, particularly through their production and sale of cult objects for the Temple of Artemis or their organic ties to the cult, thereby securing both economic prosperity and social status. In conclusion, the mining economy, which has largely been overlooked in the cities of Roman Asia Minor, served as a significant source of wealth for many cities, particularly Ephesus, and as a status symbol for professional associations.

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