

More Water at Moatra: Archaeology, Geomorphology and Toponymy in the Territory of Sagalassos

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Abstract: While evidence of ancient place names is a crucial element for our understanding of the historical landscape, many of those toponyms, other than those of major urban centres, have often disappeared in the course of history. The traditional localization of one such ancient toponym, Moatra in the territory of Sagalassos, at the present-day village of Bereket in the central district of Burdur Province (SW Türkiye) has recently been questioned. Allegedly, the vicinity of the modern village presents insufficient remains to support an identification of an ancient settlement there during the Roman Imperial period and this caused scholars to look for its location elsewhere in the area. This article presents an overview of the archaeological evidence from the Bereket intramontane basin and combines it with other strands of evidence to contest this new localization and explain why Moatra could not have been situated anywhere else but at Bereket. These arguments are based on the combination of the results of past and ongoing archaeological, geomorphological and paleo-environmental research, as well as toponymic study. These data help to shed light on the long occupation of the area and clarify the somewhat exceptional nature of the settlement of Moatra within the territory of Sagalassos, providing an outstanding example of how different disciplines can contribute to our understanding of the ancient settlement landscape and the human-environment relationship in the Late Holocene.

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Introduction

In order to add historical depth to landscapes, evidence of ancient place names is a crucial element. Yet many of those toponyms, other than those of major urban centres, have often disappeared in the course of history. Of the more than 289 sites in the vast, 1200 km² large territory of ancient Sagalassos in Southwestern Turkey, for example, only two such non-urban sites are known by their ancient names nowadays.¹ One is Sandalion, a stronghold and secondary centre on the eastern border of the Sagalassian territory, located at Sandal Asar near the present-day hamlet of Harmancık. The site became famous by the reluctance of the Galatian king Amyntas in 25 BCE to besiege it during his attempt to bring order to the rebellious region (Strabo, *Geographica*, 12.6.4). The other toponym is Moatra, recorded in a dedicatory inscription of the Roman imperial period. Traditionally, Moatra has been situated at Bereket, a village situated in the southwestern part of the territory of Sagalassos, in the central district of Burdur Province (Fig. 1). It lies in an intramontane basin, at an altitude of 1,410-1,440m above sea level, surrounded by two mountain ridges, the Kokayanık Tepe in the west and the Beşparmak Dağları in the northeast. On his travels with W.M.

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¹ A third alleged toponym, Magastara, recorded by Bean at Günalan in the northeastern part of the Sagalassian territory (Bean 1959, 75), has been proven to be a misreading of the personal name Magasilbis (Balzat 2016).

Ramsay through the region in 1884, A.H. Smith discovered at Bereket a Roman imperial period stele.² The 1.37m high limestone monument was decorated with a relief depicting a naked standing Herakles, with a lion's skin hanging over his left arm, his left hand holding a club placed on the floor and a libation bowl or *phiale* in his right hand (Fig. 2).³

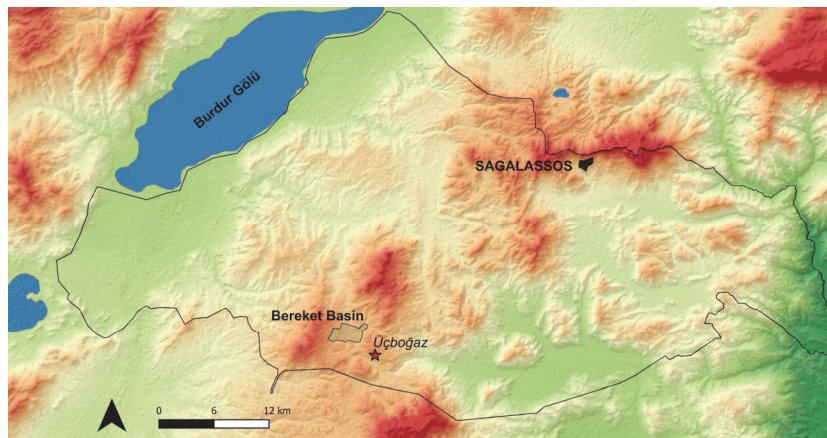


Fig. 1) Map of the territory of Sagalassos with indication of the Bereket Basin (©Sagalassos Project)



Fig. 2) Picture of the now missing Herakles Stele (Bean Archive, MOCA.Bean.B10.12; Museum of Classical Archaeology, Cambridge. Photograph by George Ewart Bean, 1955. CC BY-NC-ND 4.0.)

It was inscribed in Greek with a dedication to “Herakles of the *kome* of the Moatreis”, set up by the supervisors (*epimeletai*), Manes, son of Tatas, and Attalos, son of Apollonios, and was carved by Troilos, son of Arnestes and grandson of Tydes.⁴ The involvement of village functionaries implies a communal dedication.⁵ The monument, as well as its collective commission, identifies Herakles as one of the chief gods of the village community. This stele, now lost, prompted Smith and others after him to identify Bereket as the ancient *kome*, or village, of Moatra.⁶

This traditional localization of Moatra has recently been contested in an article by Mehmet and Nesrin Özsait, due to the alleged lack of ancient remains at Bereket.⁷ Based on their work in the area, as part of the long-term exploration of the region, they argue that rather than on the fringe of

² Smith – Ramsay 1887, 229-230.

³ Similar relief-decorated *stelai* of Herakles have been documented at nearby Kozluca (Waelkens *et al.* 2000, 188) and at Bağsaray (now at the Burdur Museum, inventory number K.138.51.03), while rock-cut reliefs of Herakles have been recorded at the adjacent sites of Yarımada/Düver (Waelkens *et al.* 2000, 184) and Halı Kayas 1 near ancient Tymbrinassos (Özsait 2010, 131-132) illustrating of the popularity of the deity in the area south and southwest of Lake Burdur; on this topic also see Labarre 2015 and Polat-Becks 2015.

⁴ Smith – Ramsay 1887, 229 n° 10: Ἡρακλῆς/κώμης Μοατρέ-/ων διὰ ἐπιμε-/λητῶν Μάνου/Τατᾶ/καὶ Ἀττάλου/ Ἀπολλωίου/ καὶ Τρ(ώ)ιλος Ἀρνέ[ος/τοῦ Τυδέως/ἡργάσετο.

⁵ Although the main duty of the *epimeletai* was to ensure the maintenance and protection of buildings, their functions in rural areas are not well-known (Öztürk *et al.* 2020, 174). At the village of Pronnoeitai near Nikaia in Bithynia, for example, they were eponymous officials, involved in the erection of an altar to Zeus Basilikos (Öztürk *et al.* 2020, 172-175).

⁶ Ramsay 1895, 338 n° 185; Bean 1959, 110-111; Waelkens *et al.* 2000: 54-64; *I.Mus. Burdur*, 23 n° 20.

⁷ Özsait 2018, elaborating an idea first propounded by Özsait 2012, 162.

the intramontane basin of Bereket where the village of Moatra is usually situated, the ancient settlement should be looked for elsewhere, namely at the hillside site of Üçboğaz, located some 4 km southeast of Bereket. Their survey of the site of Üçboğaz yielded a considerable amount of pottery dating to the Roman Imperial period which Özsait holds as convincing evidence to allow such an identification.⁸ In his opinion, Bereket itself presents insufficient remains to support an identification of an ancient settlement there during the Roman Imperial period.

In this article, we argue that there are several reasons which contest this new localization and explain why Moatra could not have been situated elsewhere but at Bereket. These arguments are based on the combination of the results of past and ongoing archaeological, geomorphological and paleo-environmental research, as well as toponymic study. These data help to shed light on the long occupation of the area and clarify the somewhat exceptional nature of the settlement of Moatra within the territory of Sagalassos.

Archaeological Survey

Firstly, contrary to what is claimed by Özsait, there are in fact relatively numerous archaeological remains from different periods present in the village of Bereket. G.E. Bean already mentioned several of these remains in the report of his visit to the village in 1955.⁹ They included the standing remains of a 10 by 8m rectangular structure, built of limestone ashlars, with a lid of a sarcophagus in the form of a klinè carrying three reclining figures found nearby. This suggests a funerary monument, most probably a monumental temple-tomb of Roman imperial date.¹⁰ Bean also reported a “small sarcophagus” – undoubtedly an *osteothekos* – decorated with reliefs of standing figures, a door, and a round shield crossed by a sword and sheath on its rear, which is a typical form of burial in the territory of Sagalassos.¹¹ And finally, there was a rectangular limestone orthostat which has since then been brought to the Burdur Museum (Fig. 3a-b).¹² It is decorated on two sides with reliefs: on the front, the reliefs depict (from left to right) a torch (on the corner pilaster); a strung bow with extremities ornamented with stag heads; the bust of a female figure wearing a *chiton*, her hair parted in the middle and tied at the back, with a quiver visible behind her right shoulder tied with a strap diagonally across her chest; and what appears to be a coiled, nine-headed snake; on the left side: a standing, naked male figure, wearing a *chlamys* and holding a *kerykeion* against his left shoulder, identifiable as Hermes.

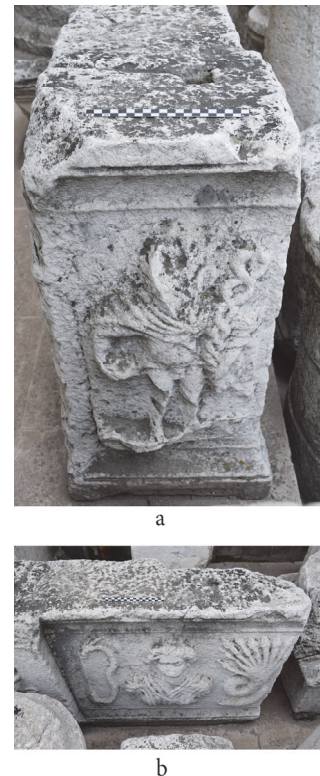


Fig. 3) The orthostat from Bereket kept at the Burdur Museum: a. front side of; b. left side (pictures taken by Peter Talloen)

⁸ Özsait 2018, 713-714.

⁹ Bean 1959 and 1960.

¹⁰ Waelkens *et al.* 2000, 54.

¹¹ Bean 1959, 111. On the use of *osteotheka* see Köse 2005.

¹² Bean 1959, 111 and 1960, 82; Burdur Museum inventory number 1366: a limestone orthostat with bottom and top mouldings that formed the right corner of a podium as indicated by the presence of a corner pilaster on the right extremity of the block, and the presence of dowel holes for connecting an upper row of stones; it has a length of 1.23m, a width of 0.35m and a height of 0.83m.

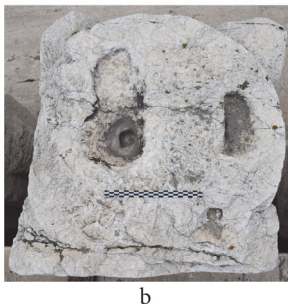
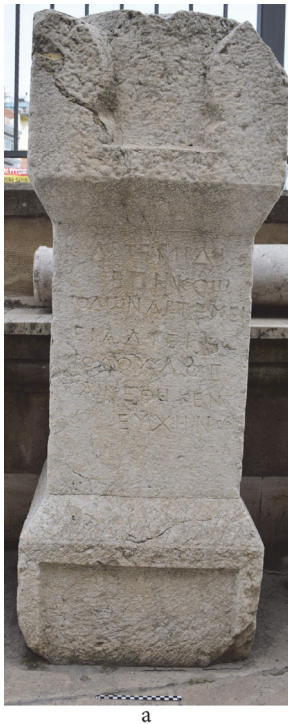


Fig. 4) The statue base dedicated to Artemis from Bereket kept at the Burdur Museum: a. front side; b. top of the statue base (pictures taken by Peter Talloen)

Given the attributes of bow, quiver and torch, the female bust in the centre of the block can most probably be identified as a representation of Artemis – a goddess who is not commonly worshipped in the territory of Sagalassos. This identification is confirmed by an inscribed rectangular limestone statue base in the form of an altar dedicated to Artemis, which was brought to the Burdur museum from the village in the late 1950s (Fig. 4a-b).¹³ The circular top surface of the base has two mounting points, one in the shape of a left foot, for a bronze statue standing in contrapposto; in view of this stance and the iconography of the orthostat mentioned above, we are dealing with a depiction of Artemis as the Greek goddess of hunt and wild nature, not as a *baitylos* in Anatolian tradition like Artemis Ephesia or Artemis Pergaia. According to the inscription, it carried a statue of Artemis ‘who listens’ and was dedicated by the *hierodoulos*, or sacred slave, Rhodon, son of Artemeisias (who fulfilled his vow).¹⁴ The monument was dated by Horsley on the basis of the lettering of the inscription to the late 1st or 2nd century AD. The fact that Rhodon was a sacred slave - a category of sacred personnel devoted to the service of a deity¹⁵ - hints at the presence of a sanctuary of the goddess in the area of Bereket. Interestingly, Rhodon mentions his mother, not his patrilineal ancestor as is common in the region¹⁶, perhaps suggesting that he continued a tradition of sacred serfdom on mother’s side.¹⁷

Some of these remains were noted again during the extensive survey of this part of the Sagalassian territory conducted by M. Waelkens and the Sagalassos team in 1996, who documented many more architectural elements in the village such as fluted columns, Ionic capitals, architraves, friezes, an acanthus acroterion, and ashlar blocks; they indicate the presence of one or more Roman imperial period monuments.¹⁸ The remains of various sarcophagi would suggest a funerary function for at least some of these structures, though it cannot be excluded that some of the blocks belonged to the abovementioned sanctuary of Artemis.

Furthermore, the Sagalassos team registered a small rectangular altar dedicated to an unidentified goddess by a certain Mamatis and built into a house at the same village, which can perhaps also

¹³ Burdur Museum inventory number 1369: a 1.57m high, 0.57m wide and 0.57m thick altar-shaped statue base in limestone carrying a dedicatory inscription on its front side, with palmette acroteria on its corners. See Bean 1960, 82 n° 135; *I.Mus. Burdur*, 23 n° 20 who erroneously identified it as a *bomos* or altar, rather than a statue base. On altar-shaped statue bases of the Roman imperial period see Coulton 2005.

¹⁴ Horsley (*I.Mus. Burdur*, 23 n° 20) emended the original reading by Bean (1960, 82 n° 135): Ἀρτέμιδι/ἐπηκόω/ Ῥόδων Ἀρτεμει-/κειάδος ἱε-/ρόδουλος/ἀνέθηκεν/(hedera) εὐχὴν (hedera).

¹⁵ On sacred slaves see Debord 1973; Potter 2015. For other sacred slaves in Pisidia see Talloen 2015, 122 and 271-272.

¹⁶ On the exceptional nature of the metronymic see Bean 1960, 82.

¹⁷ According to Horsley, the name of his mother, Artemeisias, also indicates a special link with the goddess (Horsley 1992, 127).

¹⁸ On the remains of an ancient settlement near Bereket see Waelkens *et al.* 2000, 54-64.

be attributed to the cult of Artemis.¹⁹ Several counterweights seen in the fields on the outskirts of the village were possibly used in the production of olive oil.²⁰ Finally, dense concentrations of pottery and tiles were discovered on the low hill of Kirselik to the southwest of the modern village, where the ancient village was most probably situated.²¹

Since then, the vicinity of Bereket has been intensively surveyed in 2008 by the Sagalassos Archaeological Research Project.²² An area of 1.92km² was subject to 100x100m gridded survey which yielded significant amounts of sherds (n=5,017), together weighing as much as 827.5kg.²³ In 2016, geophysical research was carried out by the University of Cologne in the southwestern part of the Bereket Basin, where the highest sherd densities were identified. In total 2.2ha was surveyed with the magnetometer and 0.5ha using geoelectric methods.²⁴



Fig. 5) View of the Bereket Basin seen from the west, with the modern village of Bereket on the left side
(©Sagalassos Project)

The survey in the area revealed occupation in the Bereket Basin starting in the Late Prehistoric Period, which saw the establishment of a mound settlement on the southern edge of the basin (Fig. 5). Large pottery fragments, flints, as well as parts of mudbrick wall can be seen on the surface as the *höyük* has recently been damaged by agricultural activity in the basin. It is estimated that the mound settlement covered nearly a hectare, and was occupied during the Early Bronze Age. After a long break in occupation spanning from the Middle Bronze Age until the Early Iron Age,

¹⁹ Waelkens *et al.* 2000, 64 and 69 fig. 68.

²⁰ Waelkens *et al.* 2000, 63 and 69 fig. 67.

²¹ Waelkens *et al.* 2000, 54.

²² Kaptijn *et al.* 2013.

²³ For a detailed discussion of the collected pottery see Kaptijn *et al.* 2013, 79-88.

²⁴ Poblome *et al.* 2018, 66-72.

the site saw renewed settlement in the 5th century BCE, now focused on the southwest part of the basin, which continued uninterrupted until the Early Byzantine period.²⁵ Pottery concentrations on the surface there suggest a peak of occupation in the late Hellenistic to Middle Roman Imperial periods which matches the human impact signals in the pollen data (see below). The many architectural remains documented in earlier surveys and probably stemming from funerary monuments belong to the same periods. These tombs suggest the presence of agricultural estates inhabited by their elite owners. Geophysical research of the terrain at Kirselik immediately southwest of the modern village recently also revealed several buried structures (Fig. 6).



Fig. 6) Results of the geophysical survey of the basin (©Sagalassos Project)

Geomorphological and Paleo-environmental Research

One of the main reasons for settlement in this intramontane basin with a surface of ca. 6.5 km² was the abundant availability of water. The village of Bereket lies on the edge of a well-watered basin with many springs, situated between the limestone mountains of Mount Beşparmak to the east, and the plateau landscape of Neogene marl deposits of the Burdur badlands to the west. Two rivers drain the basin towards Lake Burdur, the Aykırđak Deresi and the Buğduz Cayı. The presence of numerous springs in combination with the poor draining capacity of the alluvial soils that fill the basin resulted in the development of a marsh in the lowest part of the basin, once extending to an area of 35 hectares; this had been drained in the 1960s and is nowadays very fertile farmland.²⁶

While the original settlement in the basin already dates back to the Early Bronze Age, as mentioned above, geomorphological analysis indicates a high degree of erosion during the 5th century

²⁵ Kaptijn *et al.* 2013, 79-88.

²⁶ Kaptijn *et al.* 2013, 76.

BCE.²⁷ This scenario fits well with the changes in human habitation visible across the wider study region of Sagalassos.²⁸ In the Sagalassos study area, the geomorphic system was most active during the Iron Age (1150-546 BCE) when habitation emerged on high elevations and was accompanied by large-scale land clearance.²⁹ The sedimentation peak in the Bereket Basin occurred somewhat later than in other parts of the territory, possibly due to its higher altitude and more remote location.³⁰ Around the beginning of the 3rd century BCE, the pollen analyses of cores taken from the basin show the start of an important cereal cultivation and arboriculture phase included within the so-called "Beysehir Occupation phase", a period during which large parts of the landscape were taken into cultivation.³¹ At Bereket, this phase can be subdivided in two parts. The oldest part, Phase 1 (280-40 BCE), starts in the Early Hellenistic period and corresponds to three anthropogenic phases separated by two periods of abandonment of agricultural activities, during which a range of cultivated plants were introduced. The second part, Phase 2 (40 BCE – 350 CE), more or less starting in the Early Roman Imperial period, is related to the full development of arboriculture with intensive crop cultivation. The Hellenistic period (phase 1) is characterized by a substantial increase in humidity. This was not because of climate change, but human impact causing an increase in overland water flow. The deforestation of the preceding period generated a decrease of infiltration and consequently an increased overland flow and soil erosion, resulting in wetland formation in the lowest parts of the basin.³²

The geomorphology of the Bereket Basin not only impacted on the agricultural activities, but also on the cultural life of its inhabitants. The marshy landscape that arose during the Hellenistic period can help to explain the somewhat extraordinary presence of a sanctuary of Artemis at Bereket, implied by the relief-decorated blocks and the statue (base) erected by a *hierodoulos* mentioned above. The goddess was very common in the southern part of ancient Pisidia, probably as a result of the regionally dominant cult of Artemis Pergaia which was widespread in southern Anatolia.³³ Conversely, the goddess is all but absent from the territory of Sagalassos and the whole northern part of Pisidia, for that matter. There, she apparently could not take the place of the traditional mother goddess Kybele who was all dominant in Central Anatolia. The attestation of her cult at Bereket is therefore seemingly an exception in a landscape dominated by Kybele. It is particularly interesting to note that the basin of Bereket is the only location in the territory of Sagalassos where the cult of Artemis is attested. The goddess of wild nature was often worshipped in marshy areas, and sanctuaries of Artemis are often connected with springs, as illustrated elsewhere in Anatolia by the example at Ephesos.³⁴ In southern Pisidia, the location of a sanctuary of Artemis outside the city walls of Termessos, for instance, can probably be linked to the presence

²⁷ Verstraeten *et al.* 2017.

²⁸ Daems *et al.* 2021.

²⁹ Bakker *et al.* 2012, 258-259.

³⁰ Vandam *et al.* 2019.

³¹ Kaniewski *et al.* 2007.

³² For a similar case of inter-hill basins turning into marshy landscapes as the result of alluvial deposition caused by anthropogenic activities such as forest clearance in the Ilgın Plain see Harmanşah 2017, 307-308.

³³ Talloen 2015, 94.

³⁴ See Kerschner 2022; on the general location of the sanctuaries of Artemis see Cole 2004, 178-197.

of an important spring nearby, one of the few in the immediate vicinity of the city.³⁵ The dominance of aquatic environs such as streams, springs, lakes, marshes and other well-watered places may equally be evoked by the alleged dedication to Aspalos Artemis or Fish Artemis of Neapolis in the territory of Termessos, although this identification is not certain.³⁶ The particular hydrology of the Bereket Basin may therefore well have been the determining factor for the establishment of her cult there.

Moreover, in view of the local dominance of Herakles as chief protector of the community, the nine-headed coiled snake depicted to the left of the bust of Artemis on the aforementioned orthostat, should most probably be identified as the Hydra of Lerna, the nine-headed water-serpent that haunted the swamps of Lerna which Herakles had to kill as one of his Twelve Labours.³⁷ This could constitute another element of mythology that befitted the local marshy landscape of Bereket. The story was certainly known and popular among the citizens of Sagalassos, as demonstrated by civic bronze coins minted during the reign of Elagabalus (218-220 CE) and Claudius II Gothicus (268-270 CE): on their reverse they depict Herakles standing to the right, holding a club in his raised right hand and grabbing the nine-headed hydra of Lerna by the neck with his left hand (Fig. 7) – it was the only one of the Twelve Labours to feature on Sagalassian coinage.³⁸ This would mean that Herakles was also depicted and/or invoked on the monument to which the orthostat belonged. Alongside Hermes, who was commonly worshipped in the Pisidian countryside as the god of shepherds³⁹, and Artemis, who apparently had a sanctuary there, the monument appears to honour the main deities of the village.



Fig. 7) Civic bronze coin of Sagalassos from the reign of Claudius II depicting Herakles fighting the hydra (courtesy of the British Museum © The Trustees of the British Museum)

Toponymy

Other than the archaeological remains and geomorphological characteristics already mentioned, there is further compelling evidence for situating Moatra at Bereket, namely the ancient toponym itself, which may be particularly suitable for the village, as will be demonstrated below. The toponym has been overlooked in a recent study of water-related names⁴⁰, yet it is certainly informative regarding the search for water in Anatolia.

³⁵ Büyükkolancı 1996, 114 and 150; see also Çelgin 2002, 91.

³⁶ Çelgin 2003, 146.

³⁷ Stafford 2012.

³⁸ Elagabalus: von Aulock 1964, n° 5178 ; Claudius II: Hill 1897, n° 49; Levante – Weiss 1994, n° 1857.

³⁹ Talloen 2015, 95-96. The high mountainous region of the Bereket basin was particularly well suited to pastoralism (Kaptijn *et al.* 2013, 91).

⁴⁰ Schürr 2020. With TL is TAM I, with KON Zgusta, *Ortsnamen* cited. D. Schürr wants to thank Craig Melchert very cordially for hints and PDFs.

In her dissertation concerning Pisidian toponyms, Lauriane Locatelli assumes for Moatra a compound of Hittite *muwa* “force”, and perhaps Hittite-Luwian *taru*, which means “wood”⁴¹, but this combination makes little sense. There is, however, a parallel for Moatra that goes further: Σαουατρα in Lycaonia, localized at Yağlıbayat to the east of Konya; see especially the writing Σοατρέων on coins and by Strabo (ἐν Σοατροίς) with **aw* > *o(w?)*⁴². Strabo (*Geographica*, 12.6.1) cited the site as an example of the lack of water in Lycaonia. Günter Neumann already in 1958 convincingly explained its name as ‘waterless’.⁴³ So **Sa(n?)-watr-* or **Sn-watr-* can be assumed to contain the Indo-European water word **wodr* (Hittite *wādar*)⁴⁴ and analogously **Ma-watr-* with the same phonetic change or **Mu-watr-* for the Pisidian placename Moatra.

A problem thereby is τ instead of the expected *d* like in Lycian *wedri*, probably corresponding to the nymphs, later in Antiphellos often attested, hence ‘water goddesses’⁴⁵. The same stem is recurring in the toponym *Wedrēi* on coins, probably the later Rhodiapolis. Συεδρα⁴⁶, Turkish *Sedre*, in the extreme west of Rough Cilicia und *Suwadara* attested in Hittite cuneiform writing in the 13th c. BC, somewhere in Central Anatolia are explainable by **Su-wedr-* or **Su-wadara* ‘with good water’. We have accordingly in a wide area toponyms with *d/δ* against τ in Pisidia and the neighbouring Lycaonia. This has a parallel in the toponyms *Wattarwa* for at least two places, in Central Anatolia and somewhat more to the west, and *Wattarusna* in the east with *tt* for *t*/*t*⁴⁷. Both are surely derived from Hittite *wat(ta)ru-* ‘source’, and this is probably – albeit debated – a Luwian loan with **éd* > Luwian *att* according to Čop's rule and going back to Proto-Indo-European **wodr* too⁴⁸. Therefore, the Pisidian-Lycaonian **-watr-* is probably also Luwian. Cuneiform Luwian has *wār* for ‘water’, but this could have replaced a Luwian **wattar*, surviving only in derivations, which are attested only in Hittite texts.

The first component of the toponym could be the word for ‘four’ that is characteristic of the Anatolian subgroup of the Indo-European languages: If **ma-*, it could go back to the Cuneiform Luwian *māwa-*, i. e. **māwa-watr-* contracted to **mawatr-*. If **mu-*, it may be the phonetic form probably attested in Lycian and Carian. In both languages it is only attested once, which is no wonder given their poor attestation. In the epitaph TL 149, 13f. appears *me-pijaχā: m[iñti? ...] mupmme*⁴⁹. Compare in the epitaph TL 57 *se-i-pijētē pijatu: miñti: ētri: χupu: sixli: alade-hχχāne: se-hrzzi tupmme: sixla:* “and to it they gave a gift (i.e. contribution), to the Mindis, the lower grave to guard (or something similar) for a shekel and the upper one for two and a half? shekels.”⁵⁰ Analogously one can assume for TL 149: “I now gave (to the) M[indis? ...] four and a half?”⁵¹. It

⁴¹ Locatelli 2017, 184-185.

⁴² KON § 1162.

⁴³ Reprinted in Neumann 1994, 167-168.

⁴⁴ Schürr 2020, 253. In Hittite *n* disappears before *w* (Melchert 1994, 168), and that could be the case in Luwian too (“no instances of -nw- in Cluwian” Melchert per email dd. 08.08.2023).

⁴⁵ See Schürr 2020, 245-250.

⁴⁶ KON § 1265.

⁴⁷ del Monte – Tischler 1978, 372-373.

⁴⁸ See Rieken in eDiAna 1884. Gérard (2006, 250-251) considered a connection between *wat(ta)ru-* and Luwian *watt(i)-* ‘mountain’, but this is semantically not so reasonable.

⁴⁹ Kalinka (*TAM I*) transcribed [mi, but the facsimile has only *m*.

⁵⁰ 2, 5 *ada* ar attested as a fee in TL 2 and 16.

⁵¹ 5 *ada* has TL 6.

remains unclear whether the currency here was shekels too or the much more common *ada*. That *mu-* here actually means 'four' like *tu-* 'two', as Ševoroškin had assumed⁵², is now supported by the Carian dating formula in the inscription from Hyllarima recognized by Adiego⁵³: *kdušo Pil'ipus usot muot* means roughly "under the reign of Philip, in the year four(th)", referring to the reign of Philip III, 323-317 BCE.

This means that **Mawatr-* or **Muwatr-* can be explained as 'four waters', a plausible name for a place rich in water and a nice contrast to the waterless Saouatra. It could refer more plausibly to brooks than to sources, like e.g. *Punjab*, once a province of British India: 'five water(s)' in Persian. The current Turkish name *Bereket* 'abundance' may also refer to the abundance of water.

Perhaps an analogous Lycian place name with *tu-* for 'two' can even be deduced. In the 'west poem' on the agora pillar in Xanthos (TL 44) on lines d 8-9 *tu[.]adralla* is mentioned (apparently acc. pl. n., between other words with *-a*). It is not necessarily a derivation of Lycian *tukedri* 'statue'⁵⁴. Rather, it could be an ethnicon with the suffix *-a/ele/i-*, which is typical for the Lycian poetic language, and so one could assume a toponym **Tu-wedr-*: 'two waters'.

Moatra, if from **Mawatr-*, could be Luwian as a whole. And *a* for Proto-Indo-European **o* or **e* agrees with the Luwian sound development. It would be then the westernmost offshoot of Luwian, whose assumed existence in the west of Asia Minor is very questionable⁵⁵. If from **Muwatr-*, then its first component aligns with Lycian and Carian. Therefore, it may be evidence of an Anatolian language between Luwian in the east and these languages in the west, which is certainly possible.

Conclusion

The case of Moatra in the Bereket Basin provides an outstanding example of how different disciplines can contribute to our understanding of the ancient settlement landscape and the human-environment relationship in the Late Holocene. Taken together, the different strands of evidence they produce argue convincingly for the localization of Moatra at Bereket. The evidence gathered through archaeological survey already leaves no doubt that an ancient settlement was located there. The geomorphological history explained the characteristic hydrology of the Bereket Basin as localized wetland which not only prompted a suitable toponym for the location but even shaped local religious life, through the adoption of appropriate deities (e.g., the exceptional cult of Artemis) and possibly even a local interpretation of Hellenic mythology (Herakles and the Hydra). Toponymic analysis revealed that the name given to the location most probably came with the settlement of an indigenous Anatolian group (the Pisidians?) in this fertile, well-watered area, sometime after the 5th century BCE. Intensification of agricultural activity (i.e. cereal cultivation and arboriculture) would eventually lead to the establishment of landed estates owned by the elite. This resulted in a village of the Roman imperial period with clear signs of elite investment in the form of monumental architecture, and a certain level of communal organization evident in collective enterprises such as the erection of religious monuments, like the stele for Herakles – the protector of the *kome* of Moatra.

⁵² Ševoroškin 1979, 188. This has been adopted by Melchert 2004, 41.

⁵³ Adiego 2019, 19.

⁵⁴ Neumann 2007, 73 and Melchert 2004, 387 following Meriggi.

⁵⁵ See especially Yakubovich 2009, 107-117.

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**Moatra’da Daha Fazla Su:
Sagalassos Bölgesinde Arkeoloji, Jeomorfoloji ve Yer Adları
Özet**

Eski yer adlarına dair kanıtlar, tarihi coğrafyayı anlamamız için çok önemli bir unsur olsa da, büyük kent merkezleri dışında bu yer adlarının çoğu tarih içinde kaybolmuştur. Böyle bir antik yer adı olarak Sagalassos topraklarındaki Moatra’nın, günümüzde Burdur ili (GB Türkiye) merkez ilçeye bağlı Bereket Köyü’ne yapılan geleneksel lokalizasyonu yakın zamanda sorgulanmıştır. İddiaya göre, modern köyün çevresi, Roma İmparatorluk döneminde burada antik bir yerleşimin tanımlanmasını desteklemek için yetersiz kalıntılar sunmakta ve bu da akademisyenlerin bölgede başka bir yer aramasına neden olmaktadır. Bu makale, dağlarla çevrili Bereket havzasındaki arkeolojik kanıtlara genel bir bakış sunmakta ve bunları bu yeni lokalizasyona itiraz etmek ve Moatra’nın neden Bereket’ten başka bir yerde bulunamayacağını açıklamak için diğer kanıtlarla birleştirmektedir. Bu argümanlar, geçmişte yapılan ve halen devam eden arkeolojik, jeomorfolojik ve paleo-çevresel araştırmaların yanı sıra yer adları üzerine yapılan çalışmaların sonuçlarının birleşimine dayanmaktadır. Bu veriler, bölgenin uzun süreli iskânına ışık tutmaya ve Sagalassos topraklarındaki Moatra yerleşiminin istisnai niteliğini açıklığa kavuşturmaya yardımcı olarak, farklı disiplinlerin Geç Holosen’deki antik yerleşim peyzajını ve insan-çevre ilişkisini anlamamıza nasıl katkıda bulunabileceğine dair olağanüstü bir örnek sunmaktadır.

Anahtar Sözcükler: Çok disiplinli arkeoloji; antik yer adları; Pisidia; Sagalassos; insan-çevre ilişkisi.