## Cilician Chronology Group

# A Comparative Stratigraphy of Cilicia

## Results of the first three Cilician Chronology Workshops

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**Abstract:** This article presents a preliminary comparative stratigraphy of excavated sites in Plain Cilicia and one in Rough Cilicia. It is the outcome of three workshops held in 2014, 2015 and 2017. Plain Cilicia at the junction of Anatolia, Syro-Mesopotamia and Cyprus is one of the most fertile regions of the Ancient Near East. In recent years, archaeological research in the region has intensified, re-opening questions of chronology. The comparative stratigraphy discussed in the workshops is presented here in form of a gazetteer of the participating sites and a chart. This is to be understood as a first step towards a more comprehensive chronology.

Keywords: Cilicia, chronology, comparative stratigraphy

## **Introduction (Fig. 1)**

Plain Cilicia (gr. *Kilikia Pedias*, lat. *Cilicia Campestris*) is an alluvial fan covering approximately 8000 km<sup>2</sup> and one of the most fertile regions in modern-day Turkey.<sup>1</sup> It is located at the junction of Anatolia, Syro-Mesopotamia and Cyprus, defined by natural borders: the Taurus Range to the west and north, the Amanus to the east and the Mediterranean to the south. The plain is divided into a western part on the coast (Çukurova) and an eastern inland part (Yukarıova). Natural passes through the mountains give access to the neighbouring regions: the Göksu (gr. *Kalykadnos*) Valley connects Plain to Rough Cilicia (gr. *Kilikia Tracheia*, lat. *Cilicia Aspera*) to the west, the well-known Cilician Gates (Gülek Boğazı) north of Tarsus, the route from Kozan via

1 On the modern and historical geography of Plain Cilicia, see Rutishauser (in press) and Novák/Rutishauser (2017); for a historical overview see Novák (2010).

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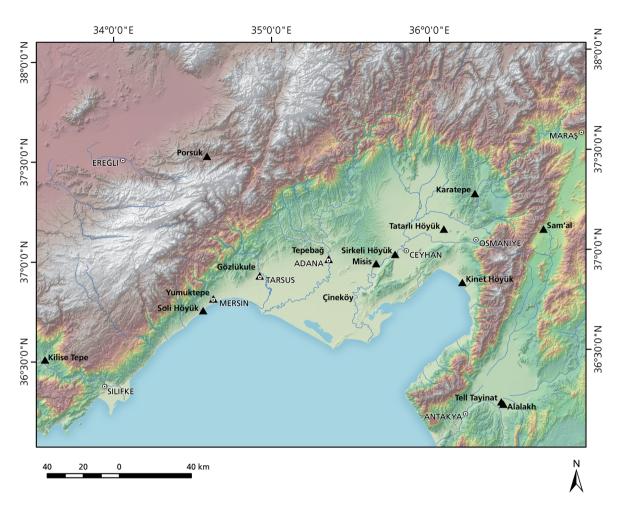


Fig. 1: Map of Plain Cilicia with sites mentioned in the text, and some modern cities (© Susanne Rutishauser, Bern University).

Feke and the Gezbel Pass (Hittite-Kizzuwatnean Caravan Route)<sup>2</sup> connect the region with the central Anatolian plateau, the Bahçe (Amanus Gates) and the Belen Pass (Syrian Gates) with the İslahiye Plain and the Amuq respectively. A number of rivers, originating in the Taurus Mountains, cross the lowlands and discharge into the Mediterranean: the four most important are the Göksu (gr. Kalykadnos), the Berdan or Tarsus Çayı (gr. Kydnos), the Seyhan (hitt. Šamri/Sapara, gr. Saros) and the Ceyhan (hitt. Puruna (?), gr. Pyramos). The fertile alluvial plain allows both dry-farming and irrigation agriculture which have supported a dense settlement pattern since the Neolithic period.

The archaeological richness of the region has been well-known since the early excavations by Hetty Goldman in Tarsus-Gözlükule,<sup>3</sup> John Garstang in Mersin-Yumuktepe,<sup>4</sup> Kazanlı Höyük and Sirkeli Höyük,<sup>5</sup> and Helmuth Bossert in Karatepe-Aslantaș<sup>6</sup> and in Misis<sup>7</sup>, as well as the Cilician survey of Veronica Seton-Williams, all undertaken before the 1960s. Since then, the most extensive surveys of Eastern Cilicia (Ceyhan

<sup>2</sup> Girginer et al. (2017: 448).

<sup>3</sup> Goldman (1956).

<sup>4</sup> Garstang (1953).

<sup>5</sup> Garstang (1937).

<sup>6</sup> Bossert (1948).

<sup>7</sup> Bossert (1957); Bossert apud Budde (1969: 19).

<sup>8</sup> Seton-Williams (1954).

and Kozan Plain) were carried out by Mustafa H. Sayar and K.S. Girginer between 2004–2006. Excavation has recently intensified in the region, although few projects have focused on new sites (**Fig. 1**). Nevertheless, new data has been steadily accumulating, providing insights into the cultural history and archaeology of the Cilician Plain. The importance of a solid chronology based on a thorough comparative stratigraphy of all investigated sites is apparent.

The purpose of a series of workshops was to initiate a dialogue among active archaeological projects in the region. The first Cilician Chronology Workshop took place in the expedition house of Sirkeli Höyük on 31<sup>st</sup> July–1<sup>st</sup> August 2014. It was followed by a second on 29<sup>th</sup>–30<sup>th</sup> August 2015 in Tatarlı and Sirkeli, and by a third from 30<sup>th</sup> May–1<sup>st</sup> June 2017 in the archaeological research centre of the Tarsus-Gözlükule Excavations. Participants from the following archaeological projects have decided to collaborate on a preliminary chronology as a base for further investigations: Porsuk-Zeyve Höyük (Dominique Beyer and Aksel Tibet, 2014), Mersin Soli Höyük (Remzi Yağcı, 2014, 2015, 2017), Mersin-Yumuktepe (Éric Jean, 2014, 2015, Tülay Özaydın, 2017), Tarsus-Gözlükule (Aslı Özyar and Elif Ünlü, 2015, 2017), Tarsus Museum (Mehmet Çavuş, 2017), Kırıt (Erkan Alkaç and Deniz Kaplan, 2017), Adana-Tepebağ (Fatma Şahin, 2017), Misis (Anna Lucia D'Agata, 2017), Sirkeli Höyük (Mirko Novák 2014, 2015, 2017, Ekin Kozal, Sabina Kulemann-Ossen, 2014, 2015, Deniz Yaşin Meier, 2015, 2017), Tatarlı Höyük (K. Serdar Girginer and Özlem Oyman-Girginer 2014, 2015, 2017, Hayriye Akıl, 2014, 2015, Ayça Özcan-Gerçek and M. Cem Fırat, 2017), Kinet Höyük (Marie-Henriette Gates, 2014, 2017, Charles Gates 2017, Gunnar Lehmann 2014, 2017), the Cilicia Epigraphic Survey (Mustafa Sayar, 2015 and 2017), the Neolithic Survey (Orkun Hamza Kaycı, 2017), and the Mopsos Survey Project (Ann Killebrew, 2014).

The short gazetteer below gives an overview of all these sites and excavations with a short bibliography for further reading. The sites are presented in geographical order from west to east. The contributors for each site are indicated and the final chart is a common outcome of all mentioned authors and the entire teams working on the included sites.

## Kilise Tepe

J. Nicholas Postgate (University of Cambridge)

### **Short Excavation History**

Excavated from 1994 to 1998 by a joint project of the Silifke Museum and the British Institute at Ankara (Ş. Basal, İ. Öztürk, J.N. Postgate). Excavation restarted in 2007 and the project closed in 2013 (J.N. Postgate, M.P.C. Jackson).

### **Topography and Excavation Areas**

Excavation in the Bronze and Iron Age levels was largely confined to the north-western corner of the mound, and to a 40 m strip trench across the centre of the mound, south of the foundations of the Byzantine church.

## **Bibliography**

Postgate/Thomas 2007; Postgate 2008; Bouthillier et al. 2014; Postgate online

<sup>9</sup> Girginer et al. (2006); Girginer (2007 and 2008a); Girginer/Girginer-Oyman (2016).

### **General Periodization**

|                              |           |                  | Phases Excavated |              |       |       |   |  |  |
|------------------------------|-----------|------------------|------------------|--------------|-------|-------|---|--|--|
| Period                       | Dates     |                  | Northwe          | Central Stri |       | Strip |   |  |  |
|                              |           | Level            | NW B.            | Stele B.     | l18   | Level | Central Strip           Phases 15–12           Phases 11–7           Phases 6c–a           2e         Surfaces 5e–a           Surfaces 4–2           2f         Surface 1 |  |  |
|                              |           |                  | IIIa-b           |              |       |       |   |  |  |
|                              | 1500 1350 | l <sub>III</sub> | IIIc             |              |       |       |   |  |  |
|                              | 1500–1350 | ""               | IIId             |              |       |       | Phases :  | 15–12  |  |
| Late Bronze<br>Age           |           |                  | IIIe             |              |       |       |   | ses 15–12 ses 11–7 ses 6c–a Surfaces 5e–a Surfaces 4–2 |  |
| 750                          |           |                  |                  | lla          |       | 3     | Phases 11–7   |  |  |
|                              | 1350–1250 |                  |                  | IIb.i        |       |       |   | es 11–7  |  |
|                              |           |                  |                  | IIb.ii       |       |       |   |  |  |
| Terminal Late                | 1250 1150 | minal Late       |                  |              | IIc   | IIc   |   |  |  |
| Bronze Age                   | 1250–1150 | lı               |                  | IId          | IId   |       | Phases 6c-a   |  |  |
|                              | 1150-800  |                  |                  |              | lle   |       | 20  | Surfaces 5e-a  |  |
| Iron Ago                     | 1150-600  | ]                |                  |              | lie   | 2     | Ze  | Surfaces 4–2   |  |
| Iron Age                     | 800–650   |                  |                  |              | IIf   | 2     | 2f  | Curfo oo 1   |  |
|                              | 800-650   |                  |                  |              | IIg-h |       | 2k  | Surface 1  |  |
| Byzantine and<br>Hellenistic |           | I                |                  |              |       | 1     |   |  |  |

## **Stratigraphy and Characteristics**

Levels V, IV and III were only investigated at the NW corner, Levels V and IV (EBA and MBA) only in a small sounding. Level III had five phases, of which the penultimate (IIId) is best attested. This was probably a forerunner of the Level II Stele Building, with some public role. Level IIa-d are phases of the so-called Stele Building which clearly had a ritual and storage function, and was destroyed twice by fire (IIc and IId). After this occupation of the NW corner only survives in fragmentary form, ceasing in Middle/Late Iron Age.

Excavation of the Central Strip was designed to recover stratified evidence bridging the end of the Bronze Age and the later Iron Age phases at the site. The levels here bear Arabic numbers. Level 1 here = Level I at the NW corner, but Level 2 starts later than Level IIa, as Level 3 seems to be contemporary with the earlier phases of the Stele Building.

## Mersin Soli Höyük (Fig. 2)

Remzi Yağcı (Dokuz Eylül University, İzmir)

### **Short Excavation History**

Systematic archaeological excavations at the ancient city of Soli-Pompeiopolis have been conducted by Remzi Yağcı under the auspices of the Ministry of Culture and Tourism, by Mersin University (1999-2003) and Dokuz Eylül University since 2004. The main goal of the excavation project at the mound is to establish a chronology and stratigraphy of the settlement and to address some specific questions on Cilician archaeology through systematic excavation and recording.



Fig. 2: Mersin-Soli Höyük (© Soli Höyük Project).

## **Topography and Excavation Areas**

Soli Höyük is situated 11 km west of Mersin. It has been possible to excavate only the northern part of the mound due to the damage caused by later settlements. Buildings related to a modern military garrison are located on the mound and the Roman Pompeiopolis theater encroaches on the northwest of the mound. The archaeological data obtained since the start of excavations at Soli Höyük show that the city was an active harbor city from the second millennium BC onwards. Soli Höyük was situated at the border between Kizzuwatna in the East and Tarhuntašša in the West and had thus an important defence system in the 15th century BC, with casemate fortifications. Written materials discovered at the mound and dating to the 15<sup>th</sup>-13th centuries BC contained Luwian names. The mound offers a wide range of architectural remains and materials that date from the Hittite Imperial period to the Roman period. Excavations at Soli Höyük are currently also carried out in squares G4, G5, G6, F6, F7, E6, E7, E8, and H6, in Archaic levels.

### **Bibliography**

Yağcı 1999, 2003, 2006, 2007a, 2007b, 2008, 2010, 2013.

### **General Periodization**

| Soli Höyük                           | Conventional<br>Period   | Date                               | Soli Period | Excavation Area                         | Structure/Findings  |
|--------------------------------------|--|------------------------------------|-------------|---|---|
| Acropolis Settlement and<br>Garrison | Hittite Imperial<br>Period<br>A city of<br>Kizzuwatna<br>(Egara?Ellipra?<br>Ura?)                        | XV–XII <sup>th</sup> c. BC         | VI.2        | E9, F9, G9,<br>G10, F9, F8,<br>H8, G8   | RLWM (arm shaped, jug, pilgrim flasks), drab ware with pot marks, a double faced stone mould (for axe and sickle), Cypriot WS II cups, XV–XIII <sup>th</sup> c. bullae and a stamp sealimpressed cup handle (Muwazi, Targasna and Parnapi), fortification walls |
| Acropolis Settlement                 | End of Hittite<br>Imperial Period<br>Sea Peoples?<br>Destruction layer                                   | XII <sup>th</sup> c. BC            | VI.1        | E9, F9, G9,<br>G10, F9, F8, H8,<br>G8   | Burnt layer (fire): burned<br>and broken jars in context,<br>scattered LH IIIC bowls in<br>other layers   |
|                                      |  | Hi                                 | atus        |   |   |
| Acropolis Settlement                 | Late Geometric,<br>Cypro-Geometric<br>+ Cypro-Archaic<br>and Orientalizing<br>Period<br>(Rhodian Colony) | Mid VII–<br>VI <sup>th</sup> c. BC | V           | G4, G5, G6, F6, F7,<br>E6, E7, E8,      | Megaron (temple?), Geometric ceramics with concentric circles, amphorae, amphorae ornamented with sacred prostitution scenes, Bird Bowls, Orientalizing craters (4 <sup>th</sup> quarter of 7 <sup>th</sup> century)  |
| Acropolis Settlement                 | Archaic<br>(Rhodian Colony)  | VI–V <sup>th</sup> c. BC           | IV          | G4, G5, G6, F6<br>F7, E6, E7, E8,<br>H6 | Architectural terracottas,<br>megaron (temple?), Wave<br>Line Ware, Ionian bowls,<br>lekythoi   |

| Soli Höyük                         | Conventional<br>Period | Date                                      | Soli Period | Excavation Area                   | Structure/Findings  |
|------------------------------------|------------------------|---|-------------|-----------------------------------|---|
| Acropolis Settlement               | Classical+<br>Persian  | V–IV <sup>th</sup> c. BC<br>Late Iron Age | III         | E4, E5, F4, F5,<br>F2, F3, G2, G3 | Attic Black and Red Figure vessels with Dionisiac figures, figurines of Bes, and of the Mother goddess with her baby, a cylindrical seal with a horse depiction (Persian) |
| Acropolis Settlement               | Hellenistic            | AD 330–83 BC                              | II          | E4, E5, F4, F5,<br>F2, F3, G2, G3 | Moulded Relief Ware, West<br>Slope ceramics, clay mould<br>of the Mother goddess  |
| Military Garrison+<br>Theatre+Bath | Roman                  | AD 350–<br>66/67 BC                       | I           | D, F, G, H 2-9, I2                | Fortification walls, theatre, bath building, inscription (II <sup>nd</sup> c. AD)   |
| Military Garrison                  | Turkish Republic       | 1994–2015                                 |             | On the whole<br>mound             | Military items (flag, cannon<br>ball) and buildings related<br>to the military garrison   |

## Stratigraphy

Tab: Radiocarbon date: Beta Analytic Inc. (2016)

| Soli Phase | Context  | Results Cal BC   | Beta                 |
|------------|--|--|----------------------|
| VI.2       | Contemporary with fortification walls  | <ol> <li>2-sigma calibrated result (95 % probability):</li> <li>Cal BC 1440 to 1380</li> <li>2-sigma calibrated result (95 % probability):</li> <li>Cal BC 1455 to 1385</li> </ol> | 1-249333<br>2-445891 |
| VI.1       | Contemporary with end of Hittite<br>Empire Period/Destruction layer:<br>Sea Peoples? | 2-sigma calibrated result (95 % probability):<br>Cal BC 1215 to 1015   | 445892               |
| V          | Contemporary with Tarsus<br>"Assyrian period"  | 2-sigma calibrated result (95 % probability):<br>Cal BC 750 to 685 / 665 to 640 / 590 to 405   | 445893               |

## Mersin Yumuktepe (Fig. 3)

Isabella Caneva (Salento University, Lecce), Éric Jean (Hitit University, Çorum), Gülgün Köroğlu (Mimar Sinan University, Istanbul), Tülay Ozaydın (Mersin)

## **Short Excavation History**

Nearly fifty years after the end of the British research in 1947 (Garstang 1953), excavations were resumed in 1993 at Yumuktepe by an Italo-Turkish team from the universities of Istanbul (Veli Sevin) and La Sapienza, Rome (Isabella Caneva). Since 2001, the excavation has been directed by Isabella Caneva (Salento University), with Gülgün Köroğlu, Çiler Altınbilek and Éric Jean as successive co-directors. The new research project has aimed to reconstruct the Cilician cultural evolution from the earliest village farming groups (Neolithic) to the development of complex societies (Chalcolithic) and urban settlements (Hittite, Roman and Medieval).

## **Topography and Excavation Areas**

Yumuktepe is a 5 ha mound, 23 m high, located in the north-western periphery of the city of Mersin. Garstang's research focused on the north-western quarter of the mound, while the new excavations have been conducted with synchronous field operations at different elevations, on top of the mound, in a southern trench, and in the north-western area, right at the southern edge of the old exposure.

## **Bibliography**

Breniquet 1995; Caneva/Köroğlu 2010; Caneva/Sevin 2004; Garstang 1953; Jean 2006; Köroğlu 1998; Manuelli 2009.

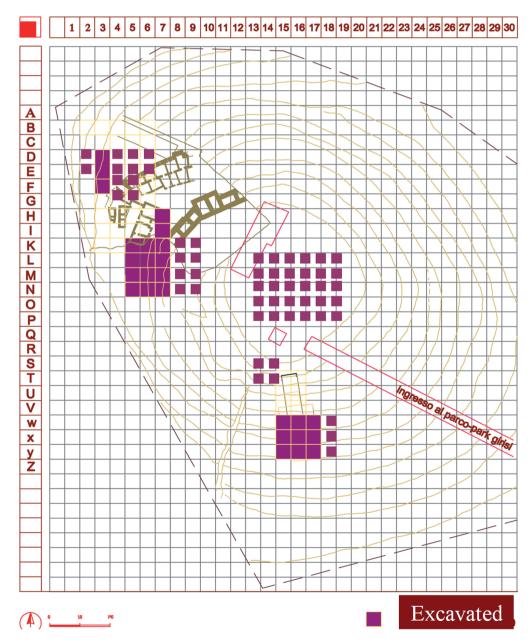


Fig. 3: Mersin-Yumuktepe. Topographic plan (© Mersin-Yumuktepe Project).

### **General Periodization**

Garstang distinguished 33 levels labelled in Roman numerals, from newest to oldest. Using the same labelling system, the current excavations have led to a re-evaluation of the stratigraphic sequence of the prehistoric levels, with a much more detailed sequence.

| Periodization              | Approximate Date                       | Levels (Garstang)  |
|----------------------------|--|--|
| Early Neolithic            | 7000–6100 BC                           | XXXIII-XXVIII  |
| Middle Neolithic           | 6100–6000 BC                           | XXVII–XXVI   |
| Late Neolithic             | 6000–5800 BC                           | XXV  |
| Final Neolithic            | 5800–5500 BC                           | <b>XXIV</b><br>Ḥalaf Culture   |
| Early Chalcolithic         | 5500–5000 BC                           | XXIII-XX   |
| Middle Chalcolithic        | 5000-4500 BC                           | XIX-XVI  |
| Late Chalcolithic          | 4500–3800 BC                           | XV-XIV Corresponds to Late 'Ubaid Culture                              |
| Early Bronze Age           | 2800–2000 BC                           | XIII–XII   |
| Middle Bronze Age          | 2000–1550 BC                           | XI-X-IX (early excavations)  |
| Late Bronze Age            | 1550–1200 BC                           | VIII/VII–V (early excavations) IX–V (new excavations: southern Trench) |
| Middle and Late Iron Age   | 900–350 BC                             | IV-III   |
| Late Roman/Early Byzantine | 4 <sup>th</sup> –7 <sup>th</sup> c. AD | II (?)   |
| Middle Age                 | 1000–1300 AD                           | I  |

## **Stratigraphy and Characteristics**

### The Neolithic settlement (north-western exposure)

The Neolithic sequence, only tested through small soundings during the British excavations, has now been intensively explored over 10m-thick deposits and an extensive area (400 m²), uncovering traces of wattle and daub structures, lighter shelters, storage pits and bins and areas for outdoor activities. The most characteristic pottery in the earliest phase consisted of thin-walled, brown, burnished hemispherical cups, often decorated with fine impressions. Interesting findings were large stamp seals or *pintaderas*, of bone or of soft stone, bearing geometric motifs on the flat surface and a handle on the back. Dated to 6600 cal. BC, these stamps are among the earliest ever found and might reflect a form of collective storing, perhaps related to seasonal transhumance. The following Middle Neolithic phase (6100–5800 BC) showed a solid architecture with stone foundations and new pottery types, with the classical Dark Faced Burnished Ware (DFBW), black or grey, and an orange, unburnished, coarse ware. The DFBW vessels were small and finely finished, probably reserved for serving and consuming food, while the orange pots were bigger and coarser, probably used as storage jars. In the Late Neolithic phase (5800 BC), houses had rounded corners and were surrounded by dozens of stone-paved cylindrical silo structures. A peripheral graveyard extended in a terraced area on the slope of the mound. Pottery was characterized by different-sized vessels, with red or brown painted motifs on a light-coloured surface. Personal ornaments, mainly necklaces of stone disk-beads, were found in the graves.

### The Chalcolithic "town" (north-western and southern exposures)

At a higher elevation, in the same north-western sector of the mound, excavations concentrated on the Chalcolithic level XVI, well known for its fortification wall, and that immediately above, which is ascribed to Garstang's level XV. In level XVI, the two-roomed contiguous houses that constitute the fortification wall were found to continue south of the previously excavated structures, in a symmetrical arrangement which appeared to cover the entire contour of the mound, with a second monumental gate being located almost opposite the one discovered in the old excavations. It was also discovered that the settlement extended over a wide area, outside the citadel, with dwelling houses set at various elevations on the slopes of the mound, on either side of a street. No difference appeared in either pottery or implements inside and outside the citadel, with a ceramic assemblage consisting mainly of gourd-shaped medium-sized jars with black geometric motifs on a cream surface. The first evidence of metallurgical activities was discovered in the citadel, with smelted copper implements, minerals, crucibles and slag, suggesting that specialised forgers were acting inside the citadel.

As for level XV, the newly discovered monumental building has been ascribed to level XV in Garstang's stratigraphy for its direct superposition on level XVI, although nothing similar to it was found in this level in the old excavations. The structure was erected above a thick platform of mudbricks, which sealed the citadel. It consists of a multi-roomed complex, with a large rectangular hall in the middle. The tripartite plan recalls the Ubaid tradition, which is also reflected in other architectural elements, such as niches and buttresses. The rooms were paved with mudbricks and contained thousands of potsherds and complete bowls, all similar in shape, size, ware and surface treatment, like the mass-produced bowls that characterise the Syro-Anatolian regions in the second half of the fifth millennium BC. Noteworthy findings consisted in a clay sealing and a peculiar pot that is quite similar in shape, ware and decoration to contemporary 'Ubaid Iranian beakers. These findings, combined with the mass-produced bowls, testify to a fairly developed organisation of production, food distribution and long distance trade, reflecting a new social division and showing an embryonic form of centralisation.

### The Early Bronze Age (north-western exposure)

An important new discovery concerns the Early Bronze Age, at the beginning of the third millennium BC, after a hiatus of about 1000 years in the occupation of the mound. A huge fortification wall was built on terraces on the slope and largely destroyed by later terraced buildings. The existence of a fortified settlement in EBA1 adds a significant element to the reconstruction of the political framework of this period in Cilicia and the eastern Mediterranean basin. Inside the fortification, a settlement district appeared, with adjoining rectangular structures, separated by mudbrick walls with stone foundations. The floor has not yet been reached but a high rectangular mudbrick platform appeared to be erected in the centre of one of the structures. The most common vessel form was a big jug of fine ware, black, red or brown, extremely thin and well fired with a metallic sound. Most of the fragments were white painted or polychrome, with free designs.

#### The Middle Bronze Age (north-western exposure)

So far only exposed in the old excavations, the Middle Bronze Age corresponds to levels XI to IX. The dominant ceramics are the painted "Amuq-Cilician Ware" (also "Syro-Cilician painted Ware" or "Cilician Painted Ware"), and a monochrome pottery, which partly shows Central Anatolian influence.

#### The Late Bronze Age (north-western and southern exposures)

The first Hittite architectural influence at Yumuktepe exposed in the old excavations (north-western exposure), and lasting from levels VII to V, is a casemate fortification wall with stone foundations and mudbrick superstructure, of which nothing remains and whose traces were not found in the new excavations. In levels VIII/VII, aside a painted ceramic, part of it showing some continuity with the painted Amug-Cilician pottery. the monochrome ware seems very connected to Central Anatolia, more as the result of a continuity with the earlier levels than of the appearance of Hittite forms, the last ones being typical of levels VI and V. In the new excavations (southern exposure), a fire layer, a thick fill of earth and a large wall were respectively identified with Garstang's levels V (LBA destruction layer), VII (a platform outside the casemate wall), and IX (where a fortification wall was suggested). Actually, the fortification wall exhumed in the southern exposure's level IX is dated with C<sup>14</sup> from circa 1500 BC (Late Bronze Age I). It was entirely made of mudbricks with some rows of river stones as support near its internal and external bases. Several rooms structurally connected to that wall provided bronze weapons and pottery, which show a clear Hittite influence. In the rooms, almost only bowls with inverted rim and some plates were found, it means a very limited repertoire, which seems to refer to food rations. The upper part of the mudbrick wall collapsed after a serious fire, which resulted in an impressive amount of burnt mudbricks being found accumulated on the dwelling remains inside the fortification. The lower part of the mudbrick wall, as well as the inner dwelling structures, were not burnt. The destruction level was intentionally recovered by a packing of about 4 m of thickness (southern exposure's level VII), in order to level the space off and to enable its resettlement. Temporarily dated to the second half of the 13th century BC, the last occupation of the Hittite period also ended in a fire (southern exposure's level V). In the two levels (VI-V) following the levelling of the area and dated to the Late Bronze Age II, the Hittite influence is also visible in the local production of the pottery and through the discovery of a biconvex seal in red serpentine, bearing an inscription in Luwian Hieroglyphic. Aside the production of local pottery of Hittite type (bowls with inverted rim, plates), an "orange ware" with a groove on the rim appears during the Late Bronze Age II, for which the only parallels found come from Kilise Tepe. Perhaps it represented a local or micro-regional evolution of the bowl with inverted rim. Probably also in the course of the Late Bronze Age II, a painted ware with a crosshatched decoration appeared at Yumuktepe for which parallels exist again at Kilise Tepe and at Soli Höyük as well. Though uncommon, imported pottery from Cyprus and the Aegean (LH III A-B) were found in LBA levels during the old excavations, as well as Red Lustrous Wheel-made Ware (with possible local imitations) as early as LBA I, in both the British and the current excavations.

### Iron Age and Medieval exposures (the summit of the mound)

In the old excavations, layers IV and III were identified as belonging to the Iron Age (1150–500 BC) and named as "Early Greek Settlements". Small rooms were identified, though no major architectural structures were encountered. Actually, the finds dated layer III to the  $7^{th}$ – $6^{th}$  c. BC and layer IV to the  $8^{th}$  c. BC. As the Iron Age layers lie just beneath the medieval building layers and were heavily disturbed by them, they could not be stratigraphically studied. Floorings of river pebbles and lime mortared surfaces were discovered right under the medieval fortification wall, with ceramic finds mainly dated to the  $6^{th}$  or  $5^{th}$  c. BC. The numerous sherds of amphorae which were usually used for transporting wine, olive oil or dry food, provide evidence of trade connections with the Aegean islands and West Anatolia as well as Syria-Palestine.

The medieval settlement dating from the 11<sup>th</sup> to 13<sup>th</sup> c. occupied the top of the mound, with a castle dominating the surrounding plain, built when the region passed into Byzantine hands at the end of the 10<sup>th</sup> c. The construction of the fortress destroyed the underlying strata from the Greek, Late Roman (2<sup>nd</sup>–4<sup>th</sup> c.) and Early Byzantine (5<sup>th</sup>–7<sup>th</sup>? c.) periods. As a wide area in the eastern part of the mound served as a cemetery from the second half of the 12<sup>th</sup> c. onwards, the settlement then shifted toward the slopes and the flat area around the mound. The earliest settlement was encircled by a casemate fortification wall and centered on a church and a burial chapel. The plan of the church was the four pillar type cross inscribed within a square, probably supported by columns, which were later replaced with piers and covered with frescoes. The building, converted into a storehouse, was destroyed by a fire in the mid-12<sup>th</sup> c. The buried bodies, head to the west, were accompanied with gifts, such as glass goblets, perfume bottles, glazed bowls, plates, earrings, bracelets and crosses. On the southern side of the mound were houses, work areas or possibly another chapel from the 11<sup>th</sup> and 12<sup>th</sup> c. The rich and varied finds, including 22 coins of the Byzantine and Islamic states reflect their close trade

relations with Yumuktepe. Various types of bread stamps, pilgrim terracotta ampullae, amphorae with stamped inscriptions, bowls, pots and plates, with monochrome glaze or decoration applied by means of various techniques, were uncovered. Ceramics were either of local Cilician production or imported from Constantinople, the Aegean, Cyprus, Syria, Lebanon, Iraq and Egypt, such as the ceramics known as Saint Simeon, Crusader or Al Mina wares, whose production site is identified around the port of Antioch on the Orontes. Glass and goblet-shaped lamps as well as various other bottles and beakers constitute the glass finds.

## Tarsus-Gözlükule (Fig. 4)

Aslı Özyar, Elif Ünlü (Boğaziçi University, İstanbul)

## **Short Excavation History**

The settlement mound of Tarsus-Gözlükule was excavated by a team under the direction of Hetty Goldman between 1935-1939 and 1947-1949. The aim was to establish the chronological sequence of a prehistoric settlement in Cilicia to connect the material culture of the Aegean world and the Near East. The results of the excavations were published in a series of preliminary reports in the American Journal of Archaeology and followed by final reports in three volumes (see bibliography). Ever since then, these have been used as a reference for the region. In 2001 Boğazici University (BU) started a project investigating the Goldman excavation study collection and the mound followed by new excavations as of 2007 and continued in 2008-2010, 2012, 2014 and 2017. The goal is to fine-tune the established chronology and stratigraphy and to address specific questions using new methods and recording systems. Annual preliminary reports are published in the Kazı Sonuçlan Toplantısı series and a more comprehensive preliminary report on the Early Medieval levels in Özyar et al. (2017).



Fig. 4: Tarsus-Gözlükule. Topographic plan (© Tarsus-Gözlükule Project).

### **Topography and Excavation Areas**

The double-peaked mound of Gözlükule was located on the banks of the Berdan or Tarsus Çayı (gr. Kydnos). Today the site rises in the southern periphery of modern Tarsus. The occupation levels reach to ca. 37 m above sea level of which at least 10 m is buried in the alluvial plain. The Goldman team worked in two areas: Section A located on the highest part of the mound and Section B in the saddle area between the peaks. The new BU excavations are located immediately to the northeast of Section A and take place in an area of approximately  $700 \text{ m}^2$ .

## **Bibliography**

Bağcı 2016; Goldman 1950, 1956a, 1956b, 1963; Karacic 2014; Mellink 1989, 1993; Manning et al. 2016 Mommsen et al. 2011; Mountjoy 2005; Özyar 2005; Özyar et al. 2017; Özyar 2017; Slane 1987; Ünlü 2009, 2011, 2015, 2016a, 2016b; Yalçın 2013

### **General Periodization**

In this chart the Goldman excavation areas are referred to as Section A and B as in her final reports, for details consult the publications.

| Period                  | Date <sup>10</sup> |                   | Tarsus-Gözlükule <sup>11</sup> |    |
|-------------------------|--------------------|-------------------|--------------------------------|----|
| Neolithic               | 7000–5800 BC       | Goldman Section A |                                |    |
| Chalcolithic            | 5800-??BC          | Goldman Section A |                                |    |
| EB la                   | 3300-2900 BC       | Goldman Section A |                                |    |
| EB Ib                   | 2900–2700 BC       | Goldman Section A |                                |    |
| EB II                   | 2700–2400 BC       | Goldman Section A |                                |    |
| EB IIIa                 | 2400-2200 BC       | Goldman Section A |                                |    |
| EB IIIb                 | 2200–2000 BC       | Goldman Section A |                                |    |
| MBI                     | 2000–1800 BC       | Goldman Section A |                                |    |
| MB II (Goldman LB I)    | 1800–1600 BC       | Goldman Section A |                                |    |
| LB I (Slane A VII–VIII) | 1600–1400 BC       | Goldman Section A |                                |    |
| LB IIa                  | 1400-?? BC         | Goldman Section A | Goldman Section B              |    |
| LB IIb                  | ??-1100 BC         | Goldman Section A | Goldman Section B              | BU |
| EIA                     | 1100-850 BC        |                   | Goldman Section B              |    |
| MIA                     | 850-700 BC         |                   | Goldman Section B              |    |
| LIA a/b                 | 700–520 BC         |                   | Goldman Section B              |    |
| Hellenistic             | 330-50 BC          | Goldman Section A | Goldman Section B              |    |
| Roman                   | 50 BC-330 AD       | Goldman Section A | Goldman Section B              | BU |
| Late Antique            | 330-637 AD         | Goldman Section A | Goldman Section B              | BU |
| Early Medieval          | 637-900AD          | Goldman Section A | Goldman Section B              | BU |
| Late Medieval           | 900–1400 AD        | Goldman Section A | Goldman Section B              | BU |

<sup>10</sup> Following the middle chronology of Manning et al. (2016): Babylon destruction by Murshili I in 1595 BC.

<sup>11</sup> Goldman Sections A and B refer to the earlier Goldman excavations, BU refers to the current Boğaziçi University excavations.

## Stratigraphy and Characteristics<sup>12</sup>

Neolithic: compares to Yumuktepe Neolithic sequence; presence of obsidian; virgin soil not reached

Chalcolithic: 'Ubaid painted wares; straw wiped (not flint-scraped) Coba bowls; Chalcolithic jar burials (cemetery?)

Early Bronze I: Red Gritty Ware

Early Bronze II: Red Gritty Ware; Wheelmade Light Clay Ware; imports increase; fortification

Early Bronze III: West Anatolian drinking set

MBI: Cilician Painted Ware; carinated bowls; eve pitchers

MB II: Later version of Cilician Painted Ware; burnished, carinated bowls with high pedestal foot; burnished, carinated bowls with four handles

LB I: Hittite Monochrome Ware; Black Impressed Ware compares to Atchana IV-V; Kinet level 15

LB IIa: Hittite Monochrome Ware; Red Lustrous Wheel-made Ware

LB IIb: Hittite Monochrome Ware; Late Helladic IIIC Early-Middle-(Late?); BU excavations revealed two phases of occupation consisting of trash pits (with HMW and LHIIIC found together in some) and few walls

**EIA:** Cypro-Cilician Painted Ware; Red Slipped Ware; few Greek imports

MIA: Cypro-Cilician Painted Ware; Red Slipped Ware; more Greek imports

**LIA** a: Cypro-Cilician Painted Ware declines; abundant Greek imports; few Assyrian imports

LIA b: still Cypro-Cilician Painted Ware; decrease in Cypriot imports; Greek Wares and imitations dominate

Persian Period: not attested

*Hellenistic*: Hellenistic Slipped Wares; Megarian bowls; West Slope Ware

Roman: Eastern sigillata A; Italian sigillata; Lead Glazed Ware; Kapitän 2 amphora; BU excavations uncovered remains of several workshops and a votive terracotta deposit containing figurines; masks and lamps in an area terraced into the LB matrix of the mound (trench C7 17)

Late Roman/Byzantine: African Red Slip Ware; Phocean Red Slip Ware; Late Roman D; Sinope Amphora; Late Roman Amphora 1; Late Roman Amphora 4; BU excavations uncovered an occupational phase with remains of architecture in the same orientation as the Early Medieval structures and reused by these.

Early Medieval: Monochrome and polychrome glazed Wares (Samarra horizon); Imported polychrome and bichrome Luster Wares; Egg-shell Ware; neckless cooking pot ("Brittle Ware"); softstone vessels; the Goldman excavations uncovered occupational phases of this period in Section A and B, but these levels have not been published (see Bağcı 2016); BU excavations uncovered several phases of occupation with one main architectural level (see Özyar et al. 2017).

Late Medieval: Fritwares; Sgraffito Wares; Port Saint Simeon Ware; BU excavations attested few remains of this phase consisting of a small paved area and drainage.

## Adana Tepebağ (Fig. 5)

Fatma Şahin (Çukurova University Adana)

### **Short Excavation History**

Tepebağ Höyük was entered in the official register in 1967, and excavations here were then carried out at irregular intervals by the Adana Archaeological Museum. Since these excavations reached a limited depth only, they provided no information about the stratigraphy of the mound for its earlier periods.

<sup>12</sup> References to characteristic pottery of the Hellenistic, Roman, Late Roman/Byzantine, Early and Late Medieval Periods were kindly provided by Agnès Vokaer.

The present excavations including the first steps to realize an archaeopark project were conducted between the years 2013–2016 under the directorate of the Adana Archaeological Museum and scientific advisory of the members of the Archaeology Department of Çukurova University, headed by the present author.

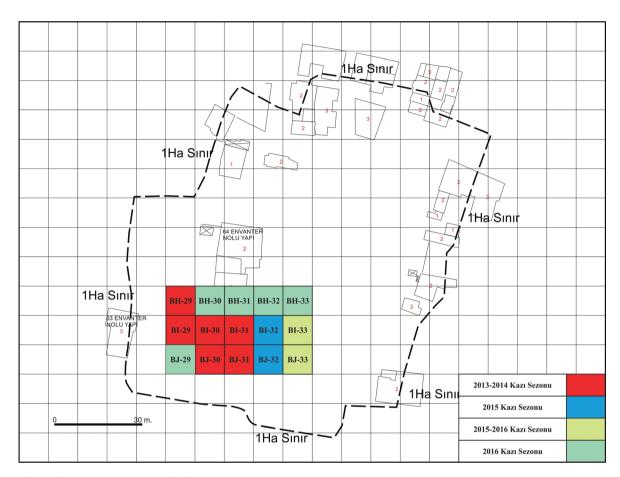


Fig. 5: Adana-Tepebağ. Topographic plan.

### **Topography and Excavation Areas**

Tepebağ Höyük is a settlement mound, which is today located in the city centre of modern Adana, in the Tepebağ and, partly, Kayalıbağ districts. It is limited to the east by the Seyhan river and measures ca. 620 m north-south and 360 m east-west. The entire Roman city including the lower settlement was spread out over an area of about 20 hectares. The mound itself rises about 15 m high from the plain level.

The top of the mound is occupied by registered historical old town buildings and modest present-day dwelling houses dating back to the 18th century. At the top of the mound, an area measuring 70×80 m was cleared from modern occupation to allow excavations. The registered historical buildings in this area are preserved and protected by the General Directorate of Cultural Assets and Museums (Ministry of Culture and Tourism).

So far, soundings have been made in 15 different trenches, each measuring 10×10 m. These trenches are situated on the summit of the mound and were opened in order to establish a proper stratigraphy throughout the site history. In two of these trenches levels at a depth of 4.5 m below the surface were reached, dating to the second millennium BC, in other words, to the Late Bronze Age. At the end of the work, reliable evaluation of the archaeological material could be made according to the established stratigraphy in spite of huge

destructions. Thus, it is understood that the mound was occupied uninterruptedly at least from the Late Bronze Age up to the present day.

## **Bibliography**

Şahin 2016a, 2016b, 2017.

### **General Periodization**

| Conventional Period                   | Period            |
|---------------------------------------|-------------------|
| Late Bronze Age                       | Period <b>VI</b>  |
| Iron Age                              | Period <b>V</b>   |
| Classical Period                      | Period <b>IV</b>  |
| Roman and Byzantine Period            | Period <b>III</b> |
| Medieval and Ottoman Period           | Period II         |
| Early periods of Turkish Republic Era | Period I          |

## **Stratigraphy and Characteristics**

### Period I: Early periods of Turkish Republic Era, Level 1

Heavy damage affected the surface of the mound due to modern urban infrastructure. Among the finds discovered in this level we can cite ethnographical material such as pottery, a metal bowl used in a Turkish bath, a thimble, a samovar and a pipe.

### Period II: Ottoman-Mediaeval Period, Level 2-3

This period with two levels corresponds to the late and early phases of the Ottoman Period. Various architectural remains belonging to the first level were uncovered and its settlement plan began to emerge. In the lower level, architecture was not well preserved due to various destructions. Terracotta vessels, stamp seals, coins, pipes, and lamps have been recovered.

### Period III: Byzantine-Roman Period, Level 4

The architectural remains of this period were severely damaged by wells and pits of upper levels. The Roman settlement was concentrated along the Seyhan river. Pottery like terra sigillata as well as various weights and lamps come from this level.

#### Period IV: Classical Period, Level 5-6

Level 5 is dated to the Hellenistic period. The architecture, which is heavily damaged by later wells and pits, consists of wall remains without recognisable plan and pebble flooring. Among the pottery forms of this period, dated to 3<sup>rd</sup>-1<sup>st</sup> centuries BC, are Megarian bowls and skyphoi. Level 6, dated to the 6<sup>th</sup>-4<sup>th</sup> centuries BC, yielded pottery forms such as kantharos and lekythos and some terracotta figurines.

### Period V: Iron Age, Level 7-9

An Iron Age level with two architectural phases was reached at a depth of about 4 m below the surface. Two different structures separated by a 3 m-wide street were exposed. Late, Middle and Early Iron Ages could be detected stratigraphically. The light-on-red or brown-painted pottery is typical for the Early Iron Age. Painted motifs during this time are geometrical and mostly include bands, cross-hatching and circles. This pottery continues to be seen together with dark grey and black-painted pottery in the succeeding Middle Iron Age. The Late Iron Age, on the other hand, yielded Cypriot imports and East Greek pottery alongside the painted grey pottery.

#### Period VI: Late Bronze Age, Level 10

A Late Bronze Age deposit was reached under the Iron Age architecture. However, it was not possible to determine how many phases the Late Bronze Age contained, due to insufficient time. Typical pottery of the Hittite Empire was recovered, however no architecture was encountered in this level. Among these, "drab ware", which is of utmost importance for dating, is well represented. Cypriot White Slip II/Milk Bowl fragments were also found.

## Misis Höyük (Fig. 6)

Anna Lucia D'Agata (Consiglio Nazionale delle Ricerche, Roma)

## Short Excavation History

With its höyük located along the lower course of the Ceyhan, Misis is one of the few urban centres on the southern route that in antiquity linked the Anatolian plateau to the Levant and the Near East, and controlled access to the Mediterranean ports. The höyük reaches 56.63 m above sea level on the western side, where the acropolis of the Roman city was located. The excavated area, currently covering about 2500 m<sup>2</sup>, comprises the summit of the höyük and its south-western slopes. The importance of the site of Misis and its archaeological potential were understood by Veronica Seton-Williams during her Cilician survey (1954: 154). The soundings opened a few years later by Helmuth Bossert on the summit of the höyük brought to light remains of walls dating from the early 1920s to Late Antiquity (our Phases 1–6). The Misis Höyük Archaeological Project, which was launched in 2012, is a multidisciplinary research carried out in collaboration between the CNR (Rome), the University of Pisa, the Ministry of Culture and Tourism of the Republic of Turkey, and the Municipality of Yüreğir. It was preceded by an archaeological survey undertaken in the area of the lower course of the Ceyhan (Salmeri/D'Agata 2011; Isola et al. 2017). Among other things, this survey determined that in antiquity Misis was the central place in the area between the Misis Dağ to the east and the Ceyhan river basin to the west.

### **Topography and Excavation Areas**

To date, our excavation on the south-western side of the höyük has made it possible to distinguish 14 architectural phases, the majority of which correspond to diverse political entities succeeding one another at the site. Phase 13, the earliest hitherto clarified (phase 14 is still being excavated), dates to the Middle Iron Age, a period that, with its long stratigraphic sequence, is one of the most important at the site and seems to mark the rise of the Syro-Anatolian city. As concerns the prehistoric settlement, layers of the late phases of the Neolithic, and of the Chalcolithic periods have been identified in a section exposed on the north-western slopes of the höyük (Salmeri/D'Agata 2011: xxxix, Ixiii–Ixiv) overlooking a now extinct branch of the Ceyhan, which

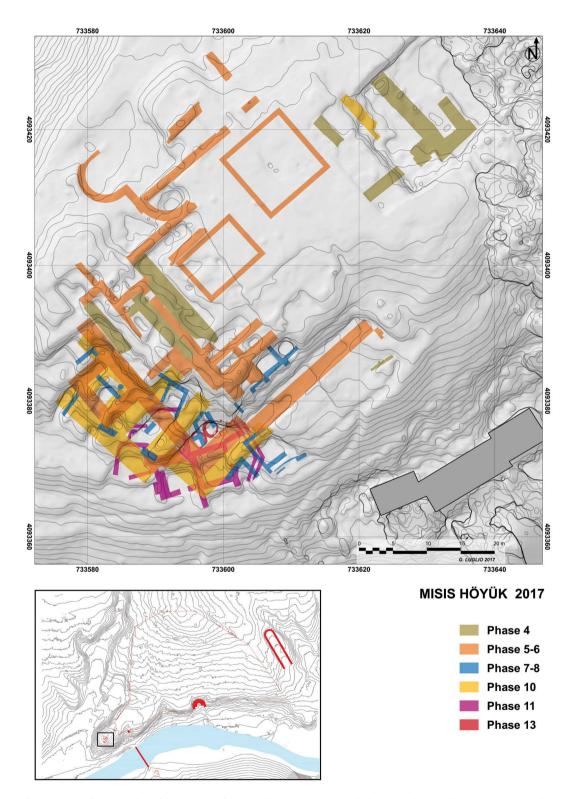


Fig. 6: Misis. Schematic plan of the excavated area, indicating occupational phases, and its localization on a general map of the ancient town (topographic survey and digital drawing by G. Luglio).

at the time ran around the hill to the west. Furthermore, the large quantity of materials from the Middle Bronze Age collected on the höyük in later layers suggests that in the first half of the second millennium BC the site was densely settled. Aside from the archaeological evidence, the long-term history of Misis is also documented

by the town's name changes, especially from the Hellenistic period onwards. Each of these names may represent a true refoundation, reflecting the establishment of a new political system.

The names of Misis in the past were:

| Paḫri (?)                          | 10 <sup>th</sup> –8 <sup>th</sup> centuries BC   |
|------------------------------------|--|
| Mopsouestia<br>Seleucia ad Pyramum | 3 <sup>rd</sup> century BC–7 <sup>th</sup> century AD<br>for a few years in the first half of the 2 <sup>nd</sup> century BC |
| al-Massisa                         | 8 <sup>th</sup> –10 <sup>th</sup> centuries AD   |
| Mamistra                           | 11 <sup>th</sup> –14 <sup>th</sup> centuries AD  |
| Misis                              | Modern Times   |

## **Bibliography**

Bossert 1957; Budde 1969; D'Agata 2017; Isola et al. 2017; Salmeri 2004; Salmeri/D'Agata 2011; Salmeri et al. forthcoming; Seton-Williams 1954.

## **General Periodization**

| Conventional<br>Period | Dates   | Misis Höyük<br>Phase | Misis Höyük  | Greece  | Cyprus                    |
|------------------------|---|----------------------|--|---|---------------------------|
| Iron Age IB            |   | 14                   | Urban occupation (excavation in progress)                          |   |                           |
| Iron Age IIA           | 950–850? BC   | 13                   | Urban occupation, silos for storage; industrial structures         | Euboean Late<br>Proto-Geometric/<br>Sub-Protogeo-<br>metric | Cypro-Geometric<br>II–III |
| Iron Age IIB           | 850-760 750 BC  | 12                   | Urban occupation,<br>installation for decanting<br>liquids         | Euboean Sub-<br>Protogeometric III/<br>Attic Middle         | Cypro-Geometric<br>III    |
|                        |   | 11.1–3               | Urban occupation,<br>terraced building                             | Geometric I–II/<br>Late Geometric I                         |                           |
| Iron Age IIB           | 760/750–720/700 BC  | 10                   | Urban occupation,<br>fortified building                            | Late Geometric<br>II–III                                    | Cypro-Archaic I           |
| Hellenistic            | 4 <sup>th</sup> –2 <sup>nd</sup> centuries BC             | 9                    | ?  |   |                           |
| Roman                  | 1 <sup>st</sup> century BC-<br>3 <sup>rd</sup> century AD | 7–8                  | Sanctuary (Temple of<br>Aphrodite-Isis?),<br>industrial structures |   |                           |
| Late Roman             | 4 <sup>th</sup> –7 <sup>th</sup> centuries                | 5–6                  | Christian monumental complex (basilica, cisterns)                  |   |                           |
| Early Islamic          | 8 <sup>th</sup> -9 <sup>th</sup> centuries                | 4                    | Urban occupation,<br>fortified building                            |   |                           |
| Medieval               | 12 <sup>th</sup> –14 <sup>th</sup> centuries              | 3                    | Fortified area,<br>industrial structures                           |   |                           |
| French Mandate         | 1919–1922   | 2                    | Military garrison  |   |                           |
| Turkish Republic       | 1970 (?)–2014   | 1                    | Military garrison  |   |                           |

## Stratigraphy and Characteristics

Misis Höyük Phase 3: Glazed pottery and polychrome sgraffito ware, also figured, are common. Large storage jars, clay kiln trivets and unfinished (biscuit-fired) pottery are present.

Misis Höyük Phase 4: Rich ceramic assemblages, with pottery of Abbasid type, in particular fine buff wares with moulded decoration (mostly jugs), and cooking pots (brittle ware, cylindrical vessels with dark fabric, and horizontal lug handles). Glass vessels are common.

Misis Hövük Phase 5-6: These phases are mostly represented by huge, ashlar foundation walls that have largely destroyed the earlier stratigraphy. Few soil deposits have been excavated, which include Late Roman pottery.

Misis Höyük Phase 7-8: Glazed red slip pottery (Eastern Sigillata A, Sigillata) is ubiquitous. There are also large quantities of terracotta figurines, clay lamps and bone tools (needles, mainly).

Misis Höyük Phases 10-12: Rich Cypro-Cilician ceramic repertoire, with distinctive cooking ware and handmade jars (Iron Age II). Greek Geometric and Cypriot imports are present.

Misis Höyük Phase 13: Cypro-Cilician ceramic wares, with shapes and characteristics of early type (Iron Age II). Greek and Cypriot imports are present.

## Sirkeli Höyük (Fig. 7)

Mirko Novák (Bern University), Ekin Kozal (Canakkale University), Sabina Kulemann-Ossen (Bern University), Deniz Yaşin Meier (Bern University)

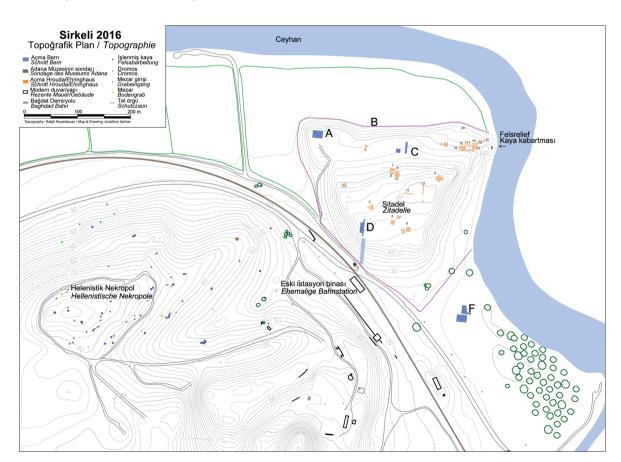


Fig. 7: Sirkeli Höyük. Topographic plan (© Sirkeli Höyük Project).

## **Short Excavation History**

Sirkeli Höyük is situated 40 km east of Adana at the left bank of the Ceyhan river, precisely at the point where the river finds its passage through the Misis Mountains. During the winter of 1936–1937 John Garstang directed the first excavations in Sirkeli Höyük. On this occasion, the rock relief showing Hittite King Muwattalli II was discovered. After Garstang decided to focus on Mersin-Yumuktepe, the site was not investigated for 55 years except for the visit of Veronica Seton-Williams in the context of her survey. In 1992 Barthel Hrouda resumed excavations, continued annually until 1996, and was followed by one campaign in 1997 under the supervision of his former architect Horst Ehringhaus. In 2006, the project was re-started under the direction of Mirko Novák and Ekin Kozal as a cooperation of the universities of Tübingen and Çanakkale. In 2011 the project was transferred to Bern University, and since 2014 Deniz Yaşin Meier has replaced Ekin Kozal as co-director.

## **Topography and Excavation Areas**

The settlement comprises the mound proper of 8 ha, a south-eastern and southern lower town of an additional 12 ha at minimum, extramural workshop areas to its north and east, and a necropolis on a natural hill located to the southwest of the mound. Furthermore, a suburb is attested on the opposite side of the river to the north. The mound itself thus formed only the citadel of the ancient settlement. It rises to a height of almost 40 m and was subdivided by a step in elevation into a lower northern "outer" plateau and a higher southern "inner" citadel. Excavations of Garstang, Hrouda and Ehringhaus focused exclusively on the citadel mound. The lower town has only been discovered by geophysical prospections and surface surveys undertaken since 2007. Since then, one major trench has been opened in the south-eastern (Sector F), and a minor one in the northern (Sector B) lower town. Other recent excavations are located in the north-western (Sector A) and central (Sector C) parts of the plateau and on the summit of the inner citadel mound (Sector D).

## **Bibliography**

Ahrens et al. 2010; Ehringhaus 1999; Hrouda 1997; Kozal/Novák 2013 and 2017; Novák et al. in press.

### **General Periodization**

Stratigraphy is counted separately in each Sector, giving the Sector key (A, D, F etc.) and the local phase in Arabic numbers (A09, F15 etc.). Within each area of the site a comparative stratigraphy of all sectors leads to an architectural periodization, given in Roman numbers. To distinguish the stratigraphies of each area a marker is added for Lower Town ("U"), Plateau ("P") and inner Citadel ("Z"). In this way, three different stratigraphies exist in Sirkeli for the three parts of the settlement.

On the basis of the characteristics of the architecture and the artefacts an overall periodization is defined. To avoid any misinterpretation or misunderstanding, these periods are not named after the commonly used Metal Age terminology but instead according to a neutral regional periodization adopted and developed from the "Associated Regional Chronologies for the Ancient Near East and the Eastern Mediterranean (ARCANE)" project, which successfully challenged the conventional third millennium BCE chronologies. The new regional terminology for Cilicia used in Sirkeli introduces Early, Old, Middle and Neo-Cilician Periods, abbreviated as ECI, OCI, MCI, and NCI, respectively, after the ARCANE system. LCI means Late Cilician Period, dating from 330 BCE until AD 636.

| Conventional Periodization (approximate correlation)                    | Approximate Date <sup>14</sup> | New Cilician Periodization |
|---|--------------------------------|----------------------------|
| Early Bronze Age I–IV   | 2900-2050                      | ECI                        |
| Middle Bronze Age I   | 2050–1950                      | OCI1                       |
| (corresponds to Ur III/Isin-Larsa and Alişar III/ <i>Kārum</i> -Period) | 1950–1700                      | OCI 2                      |
| Middle Bronze Age II  | 1700–1560                      | OCI 3                      |
| (corresponds to Babylon I and Hittite Old Kingdom)                      | 1560–1522                      | MCI1                       |
| Late Bronze Age I   | After 1522–1420                | MCI 2                      |
| (Kizzuwatna)  | 1420–1400                      | MCI 3a                     |
| Successive Mittanni and Hittite Dominance                               | 1400–1350                      | MCI 3b                     |
| Late Bronze Age II  | 1350–1190                      | MCI 4                      |
| Part of Hittite Empire  |                                |                            |
| Iron Age I  | 1190–1130                      | NCI 1                      |
|   | 1130-950                       | NCI 2                      |
| Iron Age II   | 950–720                        | NCI 3                      |
|   | 720–609                        | NCI 4                      |
| Iron Age III  | 609–539                        | NCI 5                      |
|   | 539–330                        | NCI 6                      |

## **Stratigraphy and Characteristics**

| Period | Citadel (Z)                                  | Plateau (P)                                      | Lower Town (U)                                  |
|--------|--|--|---|
| ECI 5  | <b>Z XI</b> Domestic architecture            | Sherds   | Attested in survey:<br>Northern Lower Town      |
| OCI 1  | zx   | Sherds   | Attested in survey:                             |
| OCI 2  | Dense occupation, domestic architecture      | P VII  | Northern, Southern and Southeastern Lower Towns |
| OCI 3  | domestic architecture                        | Mud brick architecture                           | Southeastern Lower Towns                        |
| MCI1   | Z IX   | PVI  | Attested in survey:                             |
| MCI 2  | ?  | Stone building A1                                | Northern Lower Town                             |
| MCI 3  | Z VIII                                       |  |   |
| MCI 4  | Z VII  | Attested by sherds                               |   |
| NCI 1  | Stone Building D1                            |  | UV  |
| NCI 2  | Z VI<br>Foundation of Citadel Wall (?)       | P V  Modification and reuse of                   | Foundation of City Wall                         |
| NCI 3  | <b>Z V</b><br>Reuse of Building D1           | Stone Building A1                                | U IV Early phase of City Wall                   |
| NCI 4  | Ceramic trash layer with<br>Assyrian pottery | P IV Domestic architecture                       | U III<br>Later modification of City Wall        |
| NCI 5  | Z IV   | PIII   | U II  |
| NCI 6  | Domestic architecture                        | Domestic architecture                            | Latest use and abandonment of City Wall         |
| LCI1   | Z III  | PII  | Abandonment of Lower Town                       |
|        | No architectural remains                     | Two phases of domestic                           |   |
|        | <b>Z II</b><br>Stone robbery trenches        | architecture, monumental<br>building in Sector C | Sherds in Lower Town                            |
| Recent | ZI   | PI   | UI  |

<sup>14</sup> Following Low Chronology by Mebert 2010.

**LC/ECI 5:** Late Chalcolithic Pottery derives mainly from Hrouda's excavations on the citadel mound ("Areal" 3) and from the survey. It is represented by "Chaff-Faced" and "Coarse" Wares. ECI pottery includes "Brittle Orange Ware".

**OCI**: Painted "Syro-Cilician Ware" predominates, along with plain wares, red slipped and brown slipped wares.

*MCI* is characterized by Hittite (Central Anatolian) pottery, which replaces the Syro-Cilician repertoire completely. Standard Ware is very common, whereas some pieces belong to the "Drab Ware" type. Cypriot imports include Bichrome, Red-on-Black, Monochrome, Base Ring I and White Slip II Wares. Red Lustrous Wheel-made Ware (RL) is also present.

**NCI 1** is an intermediate phase still characterized by Central Anatolian ceramic tradition but with the appearance of a few Late Helladic IIIC-sherds.

**NCI 2** shows the return of a painted pottery tradition (early types of Cypro-Cilician pottery) including the so-called "kindergarten-ware".

**NCI 3** is the period of the distinctive painted "Cypro-Cilician" pottery, including all wares of the so-called "Cypro-Geometric" repertoire, but surely locally produced.

*NCI 4* is characterized by the strong presence of Neo-Assyrian pottery, dating to the end of the 8<sup>th</sup> until mid/late 7th c. BC. A few hybrid examples show paintings of "Cypro-Cilician" style on Assyrian forms. Some Aegean imports occur.

NCI 5 and 6 show some forms reminiscent of "post-Assyrian" assemblages from Syro-Mesopotamia.

Radiocarbon analyses – most deriving from charcoal samples – were done by Sönke Szidat (Bern University) giving the following results:

| Period  | Historical<br>dating BCE | Sample                 | Phase    | Code LARA   | uncalibrated.  14C-date (before 1950) | calibrated<br>(BCE) |
|---------|--------------------------|------------------------|----------|-------------|---------------------------------------|---------------------|
| MCI 1–2 | 1560–1350                |                        |          |             |                                       |                     |
| MCI 3–4 | 1350–1190                | Si16-D0336<br>SE-D0281 | Z VIII   | BE-6014.1.1 | 3343±20                               | 1689–1536           |
|         |                          | Si16-A0039<br>SE-A0500 | P VI (?) | BE-6020.1.1 | 3338±20                               | 1687–1536           |
|         |                          | Si16-A0054<br>SE-A0508 | PVI      | BE-6022.1.1 | 3223±20                               | 1528–1439           |
|         |                          | Si13-D0182<br>SE-D0204 | Z VIII   | BE-6005.1.1 | 3191±20                               | 1501–1427           |
| NCI 1   | 1190–1130                | Si15-A0137<br>SE-A0479 | PV       | BE-6018.1.1 | 2964±19                               | 1258–1117           |
|         |                          | Si16-D0382<br>SE-D0399 | Z VII    | BE-6011.1.1 | 2929±20                               | 1209–1053           |
|         |                          | Si15-A0153<br>SE-A0479 | PV       | BE-6019.1.1 | 2916±20                               | 1206–1025           |
| NCI 2   | 1130-950                 | Si16-D0324<br>SE-D0340 | ZVI      | BE-6012.1.1 | 2934±20                               | 1210–1055           |
|         |                          | Si15-D0276<br>SE-D0287 | ZVI      | BE-6010.1.1 | 2929±20                               | 1209–1053           |
|         |                          | Si15-D0287<br>SE-D0287 | ZVI      | BE-6009.1.1 | 2917±20                               | 1206-1028           |
|         |                          | Si13-A0096<br>SE-A0460 | PV       | BE-6016.1.1 | 2903±20                               | 1191–1013           |
|         |                          | Si16-D0274<br>SE-D0372 | Z VI     | BE-6015.1.1 | 2901±20                               | 1191–1011           |

| Period | Historical<br>dating BCE | Sample                 | Phase | Code LARA   | uncalibrated.<br><sup>14</sup> C-date<br>(before 1950) | calibrated<br>(BCE) |
|--------|--------------------------|------------------------|-------|-------------|--|---------------------|
|        |                          | Si15-D0196<br>SE-D0261 | ZVI   | BE-6007.1.1 | 2897±20  | 1189–1009           |
|        |                          | Si15-D0222<br>SE-D0268 | ZVI   | BE-6008.1.1 | 2873±20  | 1116–980            |
|        |                          | Si16-D0345<br>SE-D0396 | ZVI   | BE-6170.1.1 | 2855±20  | 1108-936            |
| NCI 3  | 950–720                  | Si16-D0325<br>SE-D0136 | ZV    | BE-6013.1.1 | 2875±33  | 1190-932            |
|        |                          | Si13-D0172<br>SE-D0198 | ZV    | BE-6006.1.1 | 2880±20  | 1123-998            |
|        |                          | Si15-F0186<br>SE-F0204 | U III | BE-6024.1.1 | 2844±20  | 1081–924            |
|        |                          | Si16-F0260<br>SE-F0293 | U IV  | BE-6030.1.1 | 2758±43  | 1002-820            |
|        |                          | Si16-F0288<br>SE-F0302 | U III | BE-6032.1.1 | 2775±20  | 992-846             |
|        |                          | Si16-F0242<br>SE-F0278 | U IV  | BE-6029.1.1 | 2774±20  | 991-845             |
|        |                          | Si16-F0272<br>SE-F0295 | U IV  | BE-6031.1.2 | 2756±20  | 970-836             |
|        |                          | Si16-F0192<br>SE-F0279 | U IV  | BE-6027.1.1 | 2743±20  | 924-832             |
|        |                          | Si15-F0204<br>SE-F0210 | U IV  | BE-6025.1.1 | 2739±20  | 920-831             |
| NCI 4  | 720–609                  | Si16-F0176<br>SE-F0269 | U III | BE-6026.1.1 | 2763±20  | 973-838             |
|        |                          | Si16-F0202<br>SE-F0269 | U III | BE-6028.1.1 | 2717±34  | 922-808             |

## Tatarlı Höyük (Fig. 8)

K. Serdar Girginer, Özlem Oyman-Girginer (Çukurova University, Adana)

## **Short Excavation History**

The mound was discovered by M.V. Seton-Williams in 1951. After Mustafa H. Sayar's visit in 1991, the Kizzuwatna Research Project was initiated by K. Serdar Girginer in 2005. Systematic excavations began in 2007 under the directorship of K. Serdar Girginer, on behalf of the Ministry of Culture and Tourism and Çukurova University, the Metropolitan Municipality of Adana, and the Adana Chamber of Commerce.

## **Topography and Excavation Areas**

About 85 km east of Adana, Tatarlı Höyük is located within the county of Ceyhan. It is one of the largest settlements in the fertile plain of Eastern Cilicia, situated on the Hasanbeyli-Fevzipaşa road close to the Beilan gorge of the Amanus Mountains (Nurdağı), on the passage to the Islahiye Plain. In addition to its important

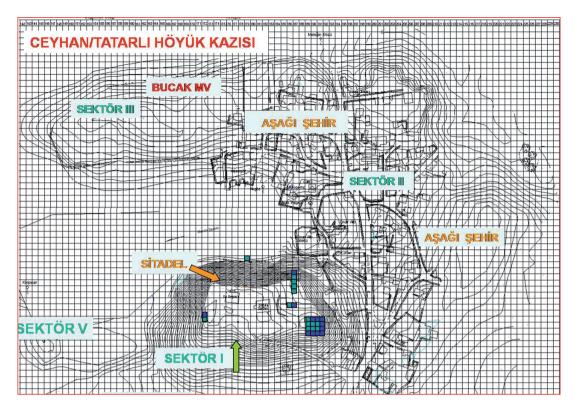


Fig. 8: Tatarlı Höyük. Topographic plan (© Tatarlı Höyük Project).

strategic location, the settlement is situated inside the largest natural water basin of East Çukurova within a basaltic environment. As a result, seven springs can today be detected in the area of the ancient settlement and its immediate vicinity. Moreover, the conjunction of the Beynamazı and Mercin streams is located inside the perimeter of the site. Basaltic formations have also provided stone resources for the settlement. Thus, the architecture of the mound consists largely of basalt.

The mound measures ca.  $230\times370$  m, and was surrounded by an extensive lower town of at least eight times the size of the mound. Hence, it was one of the largest cities of ancient Kizzuwatna in the second millennium BC.

Work in Tatarlı Höyük has concentrated on several sectors. In the East has been exposed Building A, dating to the Late Bronze Age I and II and to be identified as a temple. In the western part, a fortification system has been excavated, dating to the Late Bronze Age–Middle Iron Age. On the northern slope, a step trench was opened to reveal the stratigraphical sequence. In the Northeast, a gateway to the citadel and a paved sloping road were exposed.

### **Bibliography**

Girginer 2007; Girginer 2008a; Girginer/Uygur 2014; Ünal/Girginer 2007; Girginer et al. 2017; Girginer/Collon 2014; Ünal/Girginer 2010; Kavak et al. 2017; Girginer et al. 2016; Girginer et al. 2015; Sayar et al. 1993; Girginer 2016; Girginer-Oyman 2016; Girginer-Oyman 2017; Akıl 2017.

### **General Periodization**

| Classical Period   | Period   |
|--|--|
| Neolithic (pre-Ḥalaf)<br>Late Neolithic (Ḥalaf)                  | Tatarlı <b>VIII b</b><br>Tatarlı <b>VIII a</b> |
| Early and Middle Chalcolithic (Late 'Ubaid)<br>Late Chalcolithic | Tatarlı <b>VII</b>                             |
| Early Bronze Age III (?)   | Tatarlı <b>VI</b>                              |
| Middle Bronze Age  | Tatarlı <b>V</b>                               |
| Late Bronze Age I  | Tatarlı <b>IV b</b>                            |
| Late Bronze Age II   | Tatarlı <b>IV a</b>                            |
| Early Iron Age ?   | -  |
| Middle Iron Age<br>(Late Assyrian ?)<br>(Neo Hittite)            | Tatarlı <b>III b 1</b>                         |
| Late Iron Age (Achaemenid)                                       | Tatarlı <b>III a</b>                           |
| Hellenistic/Early Roman  | Tatarlı <b>II a–b</b>                          |
| Early Byzantine Necropolis (Citadel Eastern Slope)               | Tatarlı I                                      |

## **Stratigraphy and Characteristics**

Tatarh Höyük I: The surface level of the mound is defined by tombs lined with roof tiles, which may belong to three phases of the Early Byzantine period. The tombs were exposed on the eastern slope.

Tatarh Höyük Level IIa-b: Eastern Sigillata A, West Slope ceramics, Megarian bowls, fish plates, inwardrimmed bowls, coins and terracotta figurines characterize the material of this phase.

Tatarlı Höyük Level IIIa: An Achaemenid stela and plain pottery of the Late Iron Age were discovered.

Tatarh Höyük Level IIIb: Finds include a kohl box, and pottery of Black-on-Red, White Painted and Bichrome Ware types.

Tatarh Höyük Level IVa: Finds include Hieroglyphic bullae, seals, long-necked bottles, votive vessels, miniature bowls, and Hittite monochrome ware.

Tatarh Höyük Level IVb: Finds include Hittite monochrome wares, hieroglyphic and uninscribed bullae.

Tatarh Höyük Level V: Finds include Syro-Cilician painted pottery, Cypriot White Painted Pendant Line Style, cylinder seals, figurines, bull rhyta and ring-shaped vessels, bird-shaped vessels.

Tatarh Höyük Level VI: Pottery is characterized by Orange Ware (similar to Tilmen and Gedikli Höyük).

Tatarh Höyük Level VII: Pottery shows Mesopotamian and Syrian influence; Amuq F-related stamp seals.

Tatarlı Höyük Level VIIIa: Finds include a Halafian stamp seal.

Tatarlı Höyük Level VIIIb: Finds, including a stamp seal, are related to Northern Syria, Ra's Šamra, and Tall al-Karh 2.

| Period                      | Date                   | Level          | Historical affiliation | Features and objects       | Connections  |
|-----------------------------|------------------------|----------------|------------------------|----------------------------|--|
| Early PN<br>Late PN (Ḥalaf) | 7000–6300<br>6300–5000 | VIIIb<br>VIIIa |                        | Stamp seals<br>Stamp seals | Northern Levant<br>(Ra's Šamra,<br>Tall al-Karḫ 2, Tell Açcana,<br>Kazane, Tepecik-Çiftlik,<br>Yumuktepe, Yarım Tepe I and<br>Cilician settlements |
| EC ('Ubaid)<br>LC           | 5000-4000<br>4000-3000 | VII            |                        | Amuq F-related stamp seals | Mesopotamia,<br>Syria, Amuq  |
| EBA III (?)                 | 2400-2000              | VI             |                        | Orange wares               | Tilmen and Gedikli   |

| Period                                       | Date                                    | Level  | Historical affiliation                           | Features and objects   | Connections                                  |
|--|---|--------|--|--|--|
| MBA  | 2000–1650                               | v      | kārum-Period                                     | Painted Syro-Cilician pottery,<br>Cypriote WPPLS, cylinder<br>seals, figurines, ring-shapes<br>vessels, bull rhyta and bird-<br>shaped vessels | Northern Levant, Cyprus,<br>Central Anatolia |
| LBAI   | 1650–1450                               | IV b   | Kizzuwatna<br>Hittite Old and Middle<br>Kingdoms | Hittite monochrome wares,<br>hieroglyphic/non-hiero-<br>glyphic bullae   | Central Anatolia                             |
| LBAII  | 1450–1200                               | IV a   | Kizzuwatna<br>Hittite Province                   | Hieroglyphic bulla, seals,<br>long-necked bottles, votive<br>vessels, miniature bowls,<br>Hittite monochrome ware,<br>drab ware                | Central Anatolia, Cyprus,<br>Northern Levant |
| Early IA                                     | 1200-850                                | -      |  |  |  |
| Middle IA<br>(Neo-Hittite,<br>Late Assyrian) | 850-609                                 | III b1 | Hiyawa/Que<br>Assyrian Domination                | Kohl box, Cypro-Cilician painted pottery   |  |
| Late IA                                      | 539-330                                 | III a  |  | Achaemenid Stela and pottery   |  |
| Hellenistic/<br>Early Roman                  | 330–50 BC                               | II a-b |  | Eastern Sigillata A, West<br>Slope ceramics, Megarian<br>bowls, fish plates, incurved-<br>rim bowls, coins and<br>terracotta figurines         |  |
| Early Byzantine                              | 4 <sup>th</sup> century AD<br>and later | I      |  | Necropolis on eastern slope  |  |

## Kinet Höyük (Fig. 9)

Christine Eslick (Sydney), Charles Gates (Bilkent University), Marie-Henriette Gates (Bilkent University), Gunnar Lehmann (Ben-Gurion University of the Negev)

## **Short Excavation History**

Kinet Höyük is located on the modern seashore at the back (north end) of Iskenderun Bay (İskenderun Körfezi), ca. 35 km north of Iskenderun. Excavations were conducted on the mound and its immediate periphery by a Bilkent University (Ankara) project from 1992–2012, directed by M.-H. Gates. Additional soundings were led by A. A. Eger in 2006, 2008 and 2011 at a medieval settlement ("Tüpraş Field Site") 800 m north of Kinet; and in 2004 by B. Claasz Coockson at a Late Antique bridge at Kırıkköprü Mevkii, ca. 1.75 km south of Kinet. In collaboration with the Kinet project, A. Killebrew and her colleagues' "Mopsos Survey Project" recorded and mapped 195 ancient sites in Iskenderun Bay's eastern coastal plain, from Erzin to Arsuz, in 2004–2009.

### **Topography and Excavation Areas**

Kinet Höyük is a steep, triangular mound, 3.3 ha in area and 26 m high, set on the north bank of an ancient estuary and pointing towards the sea. Trenches ("operations", abbreviated OP) were opened on the mound's top (areas G, N, P, Y); on its east, north, west and south slopes (areas A/D, G, J/L-E/H-F-C, M and U); and on the low east terrace (K). Soundings to determine the presence of a lower town were opened in fields to the

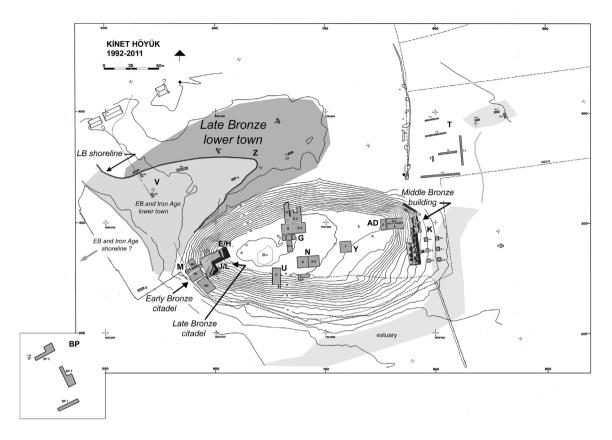


Fig. 9: Kinet Höyük. Topographic plan (© Kinet Höyük Project).

mound's east (X), north (areas R, S, T, V, W, Z) and on BP-Dörtyol terminal property between the mound and the sea ("BP trenches").

## **Bibliography**

Gates, C. 2015; Gates, M.-H. 2000, 2006, 2011; Gates et al. 2015; Lehmann 2016, 2017; Redford et al. 2001.

## **General Periodization**

| Archaeological Period                                   | Date              | Kinet Phase                           | Kinet Period |
|---|-------------------|---------------------------------------|--------------|
| EBI and earlier periods, including Late Neolithic/Ḥalaf | 5500–2900 BC      | [not excavated: finds out of context] |              |
| Early Bronze II *not excavated to base of EB II         | 2900–2600 BC      | VI.4                                  | 29–25        |
| Early Bronze III  | 2600–2420 BC      | VI.3                                  | 24           |
| Early Bronze III  | 2420–2250 BC      | VI.2                                  | 23–22        |
| Early Bronze III  | 2250–2050 BC      | VI.1                                  | 21–19        |
| Middle Bronze I   | 2000/1900–1750 BC | V.2                                   | 18           |
| Middle Bronze II  | 1750–1550         | V.1                                   | 17–16        |
| Late Bronze I<br>(= end of Hittite Old Kingdom)         | 1550–1400 BC      | IV.2                                  | 15           |

| Archaeological Period                             | Date   | Kinet Phase | Kinet Period  |
|---|--|-------------|---|
| Late Bronze II<br>(= Hittite Empire)              | 1400–1200 BC   | IV.1.1      | 14-13.1   |
| Late Bronze III<br>(Sub-Hittite)                  | 1200–1150/1130 BC  | IV.1.2      | 13.2  |
| Early Iron Age                                    | 1150/1130–900 BC   | III.3       | 12-(?)11  |
| Middle Iron Age<br>(Kinet Period 8: Neo-Assyrian) | 900–650 BC   | III.2       | 11 (?)<br>10<br>9<br>8 Neo-Assyrian                                     |
| Late Iron Age<br>(Kinet Period 5–3B: Persian)     | 650–330/300 BC   | III.1       | <b>7–6</b><br><b>5</b> Persian<br><b>4</b> Persian<br><b>3B</b> Persian |
| Hellenistic                                       | 330/300-90/75 BC   | II          | 3A-2  |
| Medieval  | 8 <sup>th</sup> /9 <sup>th</sup> c14 <sup>th</sup> c. AD | I           | 1 + Tüpraş Field site   |

## **Stratigraphy and Characteristics**

#### Kinet Höyük Phase VI.4: Early Bronze Age II, Periods 29-25

Periods 29-25: Buildings have mud brick walls without stone base. Local pottery in four fabrics is both wheelmade (Standard Ware cups and bowls); and handmade (Standard Ware pitchers and jars; Gritty Red vessels; chaffy Red Burnished vessels). Ceramic types relate to the İslahiye region, and Amuq H. A few imported Red-Black Burnished Ware sherds occur in all phases.

### Kinet Höyük Phase VI.3: Early Bronze Age III

Period 24: Buildings have stone foundations sunk in trenches. Pottery is now mostly in Standard fabric, both wheelmade and handmade. Types include conical cups, tankards, flaring plates, pitchers with low-beaked spouts, and smeared wash finishes. This ceramic tradition continues through Period 19, with new types introduced in each period.

### Kinet Höyük Phase VI.2: Early Bronze Age III, Periods 23-22; Period 23 suffers several earthquakes.

Periods 23–22: Buildings have stone socles of two or three courses set on level ground. New pottery types are deep one-handled cups and Syrian bottles. Finds include a cache of tin bronze pins and tools.

## Kinet Höyük Phase VI.1: Early Bronze Age III, Periods 21-19; Period 19 ends in abandonment, followed by a gap in occupation.

Periods 21–19: Buildings now have stone walling up to ca. 1 m high. New pottery types are goblets, depata of the squat Tarsus variety, and jars with shoulder handles. Finds include sets of unused Canaanite blades.

### Kinet Höyük Phase V.2: Middle Bronze Age I, Period 18; ends in destruction.

Period 18: The pottery is wheelmade (tablewares) and coilmade. It includes early versions of Cilician Painted ("Syro-Cilician") Ware, like MB I Tarsus and Alalah "XVIII"-X.

### Kinet Höyük Phase V.1: Middle Bronze Age II, Periods 17, 16; both end in destructions (earthquakes).

Period 17: The later version of Cilician Painted Ware appears in this level; the pottery assemblage is in most aspects similar to Period 16. This level is attested from small soundings only.

Period 16: The ceramic assemblage is similar to Period 17's, but introduces MB II transport jars ("Canaanite jars"), and MCIII-LC I Cypriot imports, including Bichrome Ware.

#### Kinet Höyük Phase IV.2: Late Bronze Age I, Period 15; ends in abandonment, followed by erosion.

Period 15: In this phase with large-scale architecture, a Hittite/Central Anatolian ceramic industry replaces the Syro-Cilician repertoire *completely*. This period includes Cypriot imports of LC I date, such as Bichrome Ware; early LC II (Base Ring I, White Slip I), and Red Lustrous Wheel Made Ware (RLWMW).

#### Kinet Höyük Phase IV.1.1: Late Bronze Age II, Periods 14 and 13.1; both end in destructions.

Periods 14-13.1: Hittite ceramic types adopt the uniform, mass-produced repertoire ("drab ware") of the Hittite empire. Deposits include LB Canaanite jars with stamped handles, LC II imports and RLWMW.

### Kinet Höyük Phase IV.1.2: Late Bronze Age III, Period 13.2; ends in destruction (earthquake).

Period 13.2: Ceramic production declines in standard although still deriving from a Hittite tradition. The industry can be characterized as sub-Hittite. The assemblage includes bowls locally adapted from LH IIIC (or Sub-Mycenaean/Cilicio-Helladic, etc.) styles, dated in Palestine by Dyn. XX-related contexts into the later 12<sup>th</sup> c. BC.

### Kinet Höyük Phase III.3: Early Iron Age, Period 12; ends in abandonment and erosion.

Period 12: This long depositional phase is non-architectural, consisting of thick trash tips and pits that include local variants of LH IIIC, as well as Cypro-Geometric I/II and other 11<sup>th</sup> c. ceramic material.

#### Kinet Höyük Phase III.2: Middle Iron Age, Periods 11-8; Periods 9 and 8 end in destructions.

Periods 11–10: These levels are attested by two poorly preserved architectural phases in a limited exposure on the west slope. Period 11 includes Cypro-Geometric II-III vessels. Cypro-Geometric III imports in Period 10 span the 9<sup>th</sup> and perhaps early 8<sup>th</sup> c. BC; this ceramic style was also imitated locally.

Period 9: Monumental architecture is associated with 8th c. BC Cypro-Cilician pottery, and this level's destruction with the campaigns of Tukultī-apil-Ešarra (Tiglath-Pileser) III (730s) or Šarru-ukīn (Sargon) II (710s). Imports include Euboean Pendant Semi-Circle (PSC) skyphoi.

Period 8: Replacement of local features by Neo-Assyrian material culture (ceramics, cylinder seals) and different building standards; they disappear with the destruction of this occupational level.

### Kinet Höyük Phase III.1: Late Iron Age, Periods 7-3B; Periods 7-6 end in destructions.

Period 7–6: The ceramic assemblage is characterized by Aegeanizing types (e.g. Wave-line wares) and imports from the Aegean and Greek mainland. Basket-handled amphoras begin in 7. Period 6 ends with a Babylonian (?) conquest (605/575 BC).

There is no ceramic evidence for a later  $6^{th}$  c. BC occupation at Kinet. The Persian phase may begin as early as Period 5, based on architectural evidence.

Period 5: This poorly attested phase is stratigraphically separate from Period 6, but the associated pottery is identical (end of  $7^{th}$  c./early  $6^{th}$  c. BC). The few pottery finds are perhaps residual.

Period 4: Pottery imports date this Persian-period settlement ca. 480 BC-400 BC; it is better attested in the lower town's port than on the mound/citadel.

Period 3B: A new citadel wall with towers is built on the top of the mound in the final stage of the Persian period (4<sup>th</sup> c. BC). This level continues without break into early Hellenistic period 3A.

### Kinet Höyük Phase II: Hellenistic, Periods 3A-2; Period 2 ends in destruction (earthquake).

Period 3A: The original (3B) architectural level is maintained with building modifications through the 3<sup>rd</sup> to mid-2<sup>nd</sup> c. BC, now characterized by regional Hellenistic pottery and imports.

Period 2: The site is refounded in the mid-2<sup>nd</sup> c. BC with a grid plan, new building materials including roof tiles, and Eastern Sigillata-A (ESA) pottery. Amphora stamps date its destruction by earthquake to the early 1<sup>st</sup> c. BC.

### Kinet Höyük Phase I: Medieval, Period 1 ends in destruction (earthquake?).

Period 1: After a long hiatus, a medieval ( $12^{th}$  to mid $-14^{th}$  c AD) settlement at Kinet reoccupies the high mound and east terrace, but not the seaside area. The earlier Tüpraş Field Site ( $8^{th}/9^{th}$  to 12 c. AD) is low-lying at the shoreline. Its destruction and abandonment may coincide with Kinet's revival.

| Kinet Period | Context   | Results Cal BP/Cal BC  | Beta-Analytic |
|--------------|---|--|---------------|
| 28/EB II     | Trash/collapse deposit in room                                  | 4140±30 BP<br>2σ: 2880–2620/2610–2600/2590–2580<br>1σ: 2860–2830/2820–2800/2760–2720/2710–2660/2650–2630 | 355577        |
| 26/EB II     | Pit fill  | 4110±30 BP<br>2σ: 2860–2800/2760–2720/2710–2570<br>1σ: 2850–2810/2740–2720/2700–2620/2610–2600/2590–2580 | 355576        |
| 24/EB III    | Trash deposit   | 3970±30 BP<br>2σ: 2570–2510/2500–2460<br>1σ: 2560/2550–2540/2490–2470                                    | 355575        |
| 24/EB III    | Trash/burnt deposit   | 3900±30 BP<br>2σ: 2470–2290<br>1σ: 2460–2340   | 355574        |
| 22/EB III    | Hearth  | 3960±30 BP<br>2σ: 2570–2520/2500–2460/2420–2410<br>1σ: 2490–2460   | 355573        |
| 20/EB III    | Destroyed hearth,<br>contemporary with<br>Canaanite blade cache | 3720±30 BP<br>2σ: 2200–2030<br>1σ: 2190–2180/2140–2120/2090–2040   | 355571        |
| 18/MB I      | '03M2: floor with hearth  | 3550±30 BP<br>2σ: 1950–1870/1840–1810/1800–1780<br>1σ: 1930–1880   | 355579        |

| Kinet Period | Context                      | Results Cal BP/Cal BC              | Beta-Analytic |
|--------------|------------------------------|------------------------------------|---------------|
| 17/MB II     | '08Ks: contents of pot on    | 3510±30 BP                         | 355583        |
|              | floor of room 138            | 2σ: 1920–1750                      |               |
|              |                              | 1σ: 1890–1860/1850–1770            |               |
| 16/MB II     | Area K building, first phase | 3370±50 BP                         | 137188        |
|              | (seeds)                      | 2σ: 1760–1525                      |               |
|              |                              | 1σ: 1725–1610                      |               |
| 16/MB II     | Area K building, final phase | 3270±70 BP                         | 137187        |
|              |                              | 2σ: 1700–1410                      |               |
|              |                              | 1σ: 1625–1450                      |               |
| 15/LB I      | West Slope: monumental       | 3290±70 BP                         | 137194        |
|              | building ('99J/L)            | 2σ: 1670–1485                      |               |
|              |                              | 1σ: 1620–1515                      |               |
| 14/LB II     | West Slope: South            | 3220±40 BP                         | 137191        |
|              | building, destruction phase  | 2σ: 1540–1415                      |               |
|              | ('98J/L)                     | 1σ: 1520–1435                      |               |
| 14/LB II     | West Slope: North building,  | 3220±30 BP                         | 355589        |
|              | destruction phase ('07E/H)   | 2σ: 1530–1415                      |               |
|              |                              | 1σ: 1510–1450                      |               |
| 13.1/LB II   | West Slope: outdoor area     | 3130±80 BP                         | 137190        |
|              | with ovens ('98 J/L)         | 2σ: 1535–1205                      |               |
|              |                              | 1σ: 1485–1305                      |               |
| 13.2/LB III  | West Slope: burnt wood/      | 2900±30 BP                         | 355587        |
|              | building collapse ('05E/H)   | 2σ: 1210–1200/1190–1140/1130–1000; |               |
|              |                              | 1σ: 1130–1020                      |               |
| 12/EIA       | West Slope: surface beside   | 2840±30 BP                         | 355585        |
|              | furnace 402 ('04E/H)         | 2σ: 1110–1100/1080–1060/1060–920;  |               |
|              |                              | 1σ: 1020–970/960–940               |               |

Chart with comparative stratigraphy of Cilicia, arranged geographically from West to East.

| CI-Period <sup>15</sup> | Dates <sup>16</sup>                     | Conventional                                  | Dates <sup>17</sup> | Kilise<br>Tepe | Mersin-Soli Mersin-<br>Höyük Yumukte | Mersin-<br>Yumuktepe  | Tarsus-<br>Gözlukule          | Adana-<br>Tepebağ | Misis<br>Höyük | Sirkeli<br>Höyük | Tatarlı<br>Höyük | Kinet<br>Höyük |
|-------------------------|---|---|---------------------|----------------|--------------------------------------|-----------------------|-------------------------------|-------------------|----------------|------------------|------------------|----------------|
|                         |   | Early Neolithic                               | 7000–6100           |                |                                      | XXXIII-XXVIII         | ;                             |                   |                |                  | AIIIN            |                |
| N                       | 0002 0007                               | Middle Neolithic                              | 6100-6000           |                |                                      | XXVII–XXVI            | Goldman                       |                   |                |                  |                  |                |
| 2                       | 0000-0000                               | Late Neolithic                                | 6000-5800           |                |                                      | xxv                   |                               |                   |                |                  |                  |                |
|                         |   | Final Neolithic                               | 5800-5500           |                |                                      | XXIV                  |                               |                   |                |                  | VIIIa            |                |
|                         |   | Early Chalcolithic 5500-5000                  | 5500-5000           |                |                                      | XXIII-XX              |                               |                   |                |                  |                  |                |
| EC                      | 5300–4200                               | Middle<br>Chalcolithic                        | 5000–4500           |                |                                      | XIX-XVI               | Ghalcolithic                  |                   |                |                  |                  |                |
| LC 1–6                  | 4200-3000                               | 4200–3000 Late Chalcolithic                   | 4500–3300           |                |                                      | XV-XIV                |                               |                   |                |                  | VII              |                |
| ECI1                    | 3000–2900                               | EBI   | 3300–2900           |                |                                      | Hiatus<br>(3800–2800) | Goldman EB la                 |                   |                | sherds           |                  |                |
| ECI 2                   | 2900–2600 <b>EB II/Ib</b> <sup>18</sup> | EB II/Ib <sup>18</sup>                        | 2900-2700           |                |                                      |                       | Goldman EB Ib                 |                   |                |                  |                  | 29–25          |
| ECI3                    | 2600-2420                               | <b>EB</b> III <sup>19</sup> /II <sup>18</sup> | 2700-2400           |                |                                      | ,                     | Goldman EB II                 |                   |                |                  |                  | 24             |
| ECI 4                   | 2420-2250                               | EB IVa <sup>19</sup> /IIIa <sup>18</sup>      | 2400-2200           | >              |                                      |                       | Goldman EB IIIa               |                   |                | 7                | 7.0              | 23–22          |
| ECI 5                   | 2250-2050                               | EB IVb/IIIb                                   | 2200-2000           |                |                                      |                       | Goldman EB IIIb               |                   |                | 7 YI             | IA.              | 21–19          |
| 0Cl1                    | 2050–1950                               |   |                     | ,              |                                      | XI                    | MBI                           |                   |                |                  |                  | ن              |
| 0CI 2                   | 1950–1700                               | MBI   | 2000–1800           | <u> </u>       |                                      |                       | (Slane A.I–A.III)             |                   |                | Z X/P VII        | >                | 18             |
| 0CI3                    | 1700–1560                               |   | 1800–1640           |                |                                      | ×                     | MBII                          |                   |                |                  |                  | 17–16          |
| MCI 1                   | 1560–1522                               | MBII  | 1640–1595           | <b>=</b>       |                                      | ×                     | (Goldman LB I/<br>Slane A.IV) |                   |                | Z IX/P VI        | IVb              | <b>→</b>       |

15 PN means "Pottery or Late Neolithic", covering the pre-Halaf Pottery Neolithic, the Ḥalaf Period and the Ḥalaf-ʿUbaid-ʿTransition (HUT); see Akkermans (2013).

EC means "Early Chalcolithic", corresponding to the late 'Ubaid ('Ubaid 3-4); see Becker (2013); dates following Akkermans (2013) and Becker (2013). LC means "Late Chalcolithic" as defined by the Santa Fé conference; see Oates (2013).

ECI means "Early Cilician", OCI means "Old Cilician", MCI means "Middle Cilician", NCI means "Neo Cilician", LCI means "Late Cilician"; see contribution "Sirkeli Höyülk" here. 16 According to Low Chronology of Mebert (2010): Babylon destruction by Mursili I in 1522 BCE. MeCI means "Medieval Cilician".

 <sup>17</sup> According to Middle Chronology of Manning et al. (2017): Babylon destruction by Mursili I in 1595 BCE.
 18 According to the Chronology proposed by H. Goldman, cf. Mellink (1965 and 1992).
 19 According to the traditional Northern Levantine Chronology, cf. Orthmann et al. (2013: 584).

| MCI 2    | 1522_1420 |                  |                |   |        | VIII-VII (old           | IB1                         |             |       |              |       | Ŕ            |
|----------|-----------|------------------|----------------|---|--------|-------------------------|-----------------------------|-------------|-------|--------------|-------|--------------|
| MCI 2    | 1322-1420 | ä                | 1595-1400      |   |        | excavations) /          | (Slane A.V–A.VI)            |             |       |              |       | q            |
| MCI 3    | 1420–1350 |                  | 2011           |   | VI.2   | IX (southern<br>trench) | LB IIa                      | VI (10)     |       | ZVIII/PVI    |       |              |
| MCI 4    | 1350–1190 | TB II            | 1400–1190      |   |        | VI<br>V                 | A.VII/VIII)                 | 3           |       | ZVII/PVI     | IVa   | 14–13.1      |
| NCI 1    | 1190–1130 | LB III/IA la     | 1190–1130      |   | VI.1   |                         | LB IIb<br>(Slane A.IX/B.IX) | <b>(</b> 9) |       | <b>→</b>     |       | 13.2         |
| NCI 2    | 1130–950  | IA Ib            | 1130–850       | = | Hiatus | niatus <i>:</i>         | Early IA                    | V (8)       |       | ZVI, PV, UV  |       | 12<br>11 (?) |
| NCI 3    | 950–720   |                  | 850-700        |   |        | ,                       |                             | V (7)       | 13-10 | zv, u iv     | IIIb1 | 11(?), 10–9  |
| NCI 4    | 720–609   | II A II          | 700-520        |   | ۸      | ıv                      | Midale IA                   | IV (6)      |       | P IV, U III  |       | 8–7          |
| NCI 5    | 609–239   | IAIII            | 520–330        |   | IV     | <b>  </b>               | Late IA a/b                 |             |       | Z IV, P III, |       | 6<br>gap     |
| NCI 6    | 539–330   |                  |                |   | III    |                         | ?                           |             |       | <b>.</b>     | IIIa  | 5-3B         |
| LCI 1    | 330–50    | Hellenistic      | 330-50         |   |        |                         |                             |             | 6     | II-III Z     | llb   | 3A-2         |
| LCI 2-4  | 50BC-300  | Roman            | 50BC-<br>300AD |   |        |                         |                             |             | 8–7   |              | lla   |              |
| P-5 ID1  | 300-650   | Late Roman       | 300-637        | _ |        | (3)                     | Late Antique                |             | 9-5   |              | 1     |              |
| MeCI 1–2 | 006-059   | Early Islamic/   | 000 229        |   |        | Histor (2)              | Farly Modioval              |             | ·     |              |       |              |
| MeCl 3   | 900-1000  | Middle Byzantine | 006-100        |   |        | atd3 (;)                | Laity medievat              |             | t     |              |       |              |
| MeCI 4-6 | 1000–1450 | Medieval         | 900–1450       |   |        | ı                       | Late Medieval               |             | 3     |              |       | 1            |

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\*extra abbreviations used here:

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