Sew long: A seamstress buried at medieval Polis, Cyprus

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Introduction

Mortuary practices of the early medieval period (late first millenium AD) in Cyprus are known from only a handful of sites. At Polis Chrysochous, excavations conducted by Princeton University since the mid-1980s have uncovered numerous burials clustered in and around two early sixth-century basilicas. The location of graves in relation to the basilicas and the type and presence of grave goods indicate differences in high- and low-status interments. All individuals interred at Polis from this time period tend to be placed in extended, supine positions, with their feet to the east and their head toward the west, which typifies Christian practice (Fig. 1).

Grave Context

- Located 10 to 12 meters south of the E.F2 basilica (Figs. 1 and 2)
- In an area reconstructed as a hub of workshops during late antiquity, prior to construction of the basilica.
- The body was placed in a pit covered with limestone slabs alongside a late Roman drainage pipe (Fig. 3)
  - Suggests the area was no longer used as a production center by the time of interment between the late 7th and 11th centuries AD.
- Distance from the church, lack of stone lining for the grave, and paucity of grave goods indicate an individual of low status.

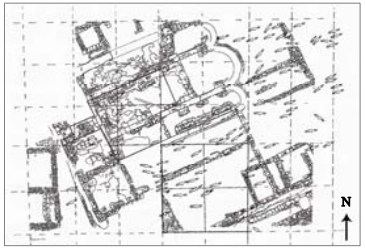

Figure 1. The E.F2 locus at the site of Polis Chrysochous showing the plan of the basilica and burials identified through 1990.

Figure 2. Location of the grave (arrow) with the basilica in the background (view to the north).

Figure 3. The skeleton *in situ* showing the outline of the grave and the Roman pipe (arrow).

Figure 4. Artifacts recovered from the seamstress's grave. From left to right: iron nail, bone needle, ceramic bottle base.

The Individual

- A woman who died in her 30s.
- A bone needle (Fig. 4) located by the right femur suggested during excavation that she may have been a seamstress.
- Alterations to the teeth and bones support this initial hypothesis (Table 1).
  - Grooves on the interproximal surface of both maxillary lateral incisors indicate repetitive use of these teeth for drawing thread.
  - Malocclusion and wear on the anterior mandibular dentition suggest she pulled material with her anterior teeth (Ronchese, 1948; Merbs, 1983),
  - Muscle attachments and facet development on her hand bones are consistent with occupational stresses attributed to tailors (e.g., Lane, 1888; Merbs, 1983).
  - Lesions identified in the hips, legs, and feet indicate habitual kneeling, sitting or squatting (Thomson, 1889, 1890; Charles, 1893-1894; Singh, 1959; Kostick, 1963; Wells, 1967; Ubelaker, 1978).

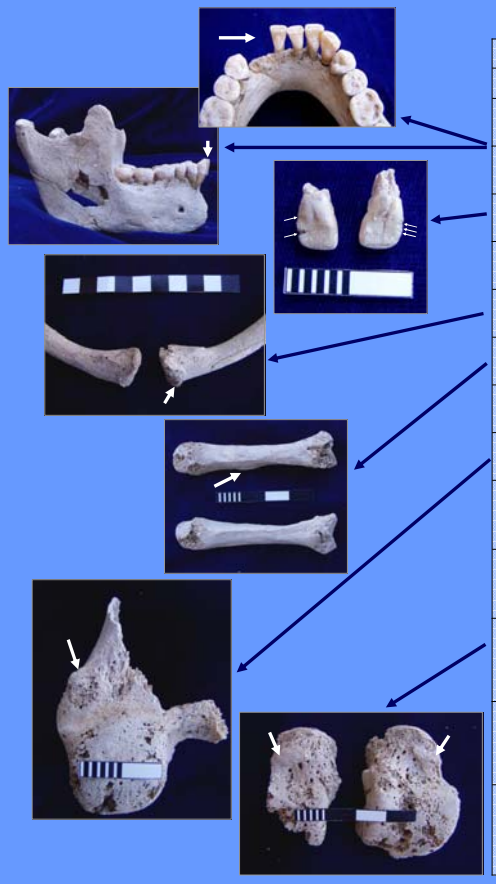

Table 1. Skeletal alterations noted during skeletal analysis and their interpretation.

Lesion	Occupational Activity
Anterior projection of mandibular incisors with alveolar resorption and heavy occlusal wear	Increased use of the anterior teeth for holding items while working
Labio-lingual striations on occlusal surfaces of mandibular incisors	Holding and cutting thread
Disto-lingual grooves on distal interproximal surfaces of maxillary I2s	Pulling thread between incisors and canines
Slight porosity to articular surfaces of R and L mandibular condyles	Osteoarthritis of the TMJ while holding objects in teeth
Robust R clavicle with degeneration of sternal end along articulations for sternum and first rib	Hand sewing
R metacarpals more robust with more pronounced muscle markings	Seamstress's fingers
Increased rugosity of the L ischial tuberosity	Inflammation from long periods of sitting
Charles' facet present above the medial condyle of the R distal femur	Squatting
Facet-like extension of dorsal aspect of R navicular, possibly related to squatting facets present on the tali	Squatting
Rugose and enlarged muscle attachments on the plantar surface of the medial tubercles on both calcanei	Flexion of the foot at the lateral four metatarsophalangeal joints
Anterior extension of the trochlear articular surface onto the necks of both tali	Squatting facets
Facets on the dorsal surfaces of both first metatarsals and first proximal phalanges at the metotarsophalangeal joint	Hyperextension of the metatarsophalangeal joints associated with kneeling
Osteoarthritic alteration to the bodies and neural arch of at least three mid-thoracic vertebrae, both scapular glenoid fossae, distal margin of the R hamate, lunate surfaces of the acetabulum, distal articular surface of the R fibula, corresponding articular facets of the R 4th and 5th metatarsals, and lateral articular facet of L patella.	

Interpretations and Implications

Weaving and lacemaking have a long history in Cyprus, and participants in textile production have been identified previously through dental grooves, notches, and wear at 15th to16th-century Malloura (Harper, 2005, 2006), related to use of the mouth in spinning (Fig. 5). The observation of an identical pattern of dental involvement and additional skeletal indicators in this individual from Polis extends the direct evidence for textile production and/or tailoring of clothing into earlier centuries, ca. 650-1100 AD, and across the island. It appears that this occupation was practiced largely by women, based on our identification of this woman and Harper's data (where sex was largely indeterminate but included two females). Systematic study of the skeletal remains from the long-term Princeton project was initiated in 2005, with much work remaining. Further investigation of the sex ratio and status of individuals with similar patterns of occupational stressors will ensue.

The detailed analysis and contextualization of this skeleton indicates not only the occupation in which this woman may have been involved, it contributes information on Cypriot society that would be lost if subsumed in reports emphasizing only population data. As such, it provides a deeper biocultural understanding of the site and society. This woman's burial reveals a personal account of life and death in the past that underscores the contribution physical anthropologists can make to large-scale archaeological projects. With the increasing necessity to convey our research to the public, hers is a story to which people can relate.

Figure 5. A Nahya woman spinning flax "through the mouth" (Crowfoot, 1974).

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