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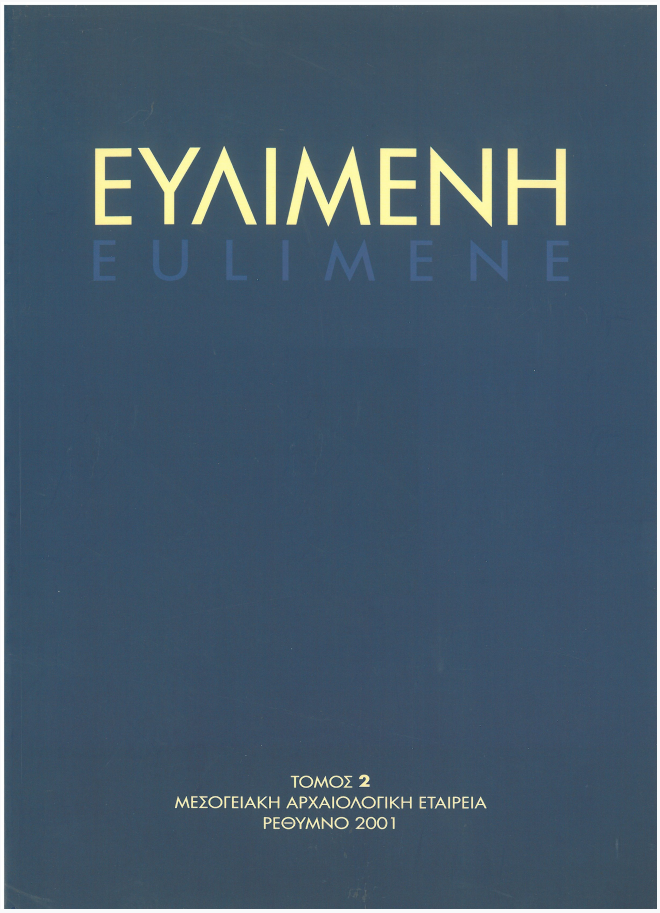

On the Clazomenian quest in Thrace during the 7th and 6th centuries BC, as revealed through Anthropological Archaeology

Anagnostis Agelarakis

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ΕΥΛΙΜΕΝΗ

ΜΕΛΕΤΕΣ ΣΤΗΝ ΚΛΑΣΙΚΗ ΑΡΧΑΙΟΛΟΓΙΑ,
ΤΗΝ ΕΠΙΓΡΑΦΙΚΗ, ΤΗ ΝΟΜΙΣΜΑΤΙΚΗ ΚΑΙ ΤΗΝ ΠΑΠΥΡΟΛΟΓΙΑ

Τόμος 2
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Antonio Corso, Attitudes to the Visual Arts of Classical Greece in Late Antiquity, ΕΥΛΙΜΕΝΗ 2 (2001), 13–51

Attitudini tardoantiche nei confronti delle arti visive della Grecia classica. Argomento del presente articolo è lo studio dei diversi momenti tramite i quali la concezione dell'arte classica è progressivamente cambiata nel periodo che va dall'età dei Severi a quella di Giustiniano. Punto di partenza di questo processo è la tesi, asserita da Flavio Filostrato nella «Vita di Apollonio di Tiana», che l'arte di creare simulacri deve basarsi sulla *phantasia* e non sulla *mimesis*. Sempre a partire dall'età severiana, sale alla ribalta l'idea che i simulacri ottimali possano divenire abitacoli delle divinità rappresentate e siano pertanto magicamente provvisti della vita e delle facoltà di questi: tale concezione può essere appieno apprezzata nel *de statuis* di Callistrato. Inoltre, la concezione idealizzata delle arti visive di età classica, e soprattutto tardoclassica, considerate provviste di un messaggio edonistico, in seno alla seconda sofistica, comporta la condanna di queste produzioni artistiche da parte dei Padri della Chiesa, che ritengono i simulacri antichi corruttori dei costumi, oltrechè privi di valore dal punto di vista teologico. Tale condanna prelude alla distruzione di non pochi simulacri pagani praticata dai seguaci più estremisti del Cristianesimo tra 4 e 5 sec. Inoltre, il gusto cambia e, a partire dalla seconda metà del 4. sec., i palazzi e le ville provvisti di facciate scenografiche, le pitture e i mosaici ricchi di colori e involucranti gli spazi interni, piacciono di più talora delle opere d'arte antiche, in particolare delle statue. Tuttavia, a partire dal 4 sec., matura nella cultura cristiana il principio che si deve distinguere tra il pregio artistico delle statue classiche, che si può ammirare, e il loro contenuto religioso, che invece è inaccettabile. Questa distinzione sta alla base della fioritura di musei di statue antiche, in occidente durante il periodo fra l'ultimo quarto del 4. sec. e la prima metà del 5, a Costantinopoli tra Costantino e Giustiniano. L'articolo è chiuso da alcune note sull'affermazione in tale corso di tempo della convinzione che le statue in marmo di età classica non fossero colorate, ma mostrassero il colore del marmo, della tesi che la scultura era più importante della pittura nella Grecia classica, e infine di interpretazioni ingentilite, edonistiche e idealizzate dell'arte classica.

V. Karageorghis, Some innovations in the burial customs of Cyprus (12th – 7th centuries BC), ΕΥΛΙΜΕΝΗ 2 (2001), 53–65

Μερικές αλλαγές στα ταφικά έθιμα της Κύπρου (12ος–7ος αι. π.Χ.). Σ' αυτή τη μελέτη γίνεται προσπάθεια να καταδειχθούν οι αλλαγές στην ταφική αρχιτεκτονική και τα ταφικά έθιμα της Κύπρου κατά την περίοδο μεταξύ του 12ου και του 7ου αι. π.Χ., από την εποχή δηλαδή που εμφανίζονται στην Κύπρο οι πρώτες πολιτιστικές καινοτομίες κατά

τις αρχές του 12ου αι. π.Χ. Οι αλλαγές στην ταφική αρχιτεκτονική κορυφώνονται κατά τον 11ο αι. π.Χ. με την εμφάνιση των τάφων με στενόμακρο δρόμο και μικρό τετράπλευρο θάλαμο, που θα μεταφέρθηκαν στο νησί από το Αιγαίο, με την άφιξη των πρώτων Αχαιών αποίκων. Είναι τότε που παρατηρούνται και τα πρώτα δείγματα καύσης των νεκρών. Γίνεται εκτενής αναφορά στις «ηρωϊκές» ταφές του 8ου–7ου αι. και επιχειρείται σύγκριση με ανάλογα φαινόμενα στο Αιγαίο, ιδίως στην Κρήτη και την Ετρουρία, και συσχετίζονται τα νέα ταφικά έθιμα με τις νέες κοινωνικές δομές που χαρακτηρίζουν τις χώρες τις Μεσογείου, με την εμφάνιση της αριστοκρατικής άρχουσας τάξης και του ανάλογου τρόπου ζωής και συμπεριφοράς.

D. Paleothodoros, Satyrs as shield devices in vase painting, ΕΥΛΙΜΕΝΗ 2 (2001), 67–92

Σάτυροι ως επισήματα ασπίδων στην αγγειογραφία. Περίπου 120 αγγεία της αρχαϊκής και πρώιμης κλασικής περιόδου παρουσιάζουν ασπίδες με τη μορφή του σατύρου ως επίσημα. Τεχνοτροπικά, στον μελανόμορφο ρυθμό επικρατεί το θέμα της ανάγλυφης μάσκας, που εγκαινιάζει ο Κλειτίας, ενώ στον πρώιμο ερυθρόμορφο κυριαρχεί ο Επίκτητος με την εισαγωγή δύο θεμάτων, της μετωπικής μάσκας και της μάσκας σε προφίλ και σκιαγραφία. Η εικονογραφική και αρχαιολογική ανάλυση δείχνει ότι η επιλογή του συγκεκριμένου θέματος υπαγορεύεται από την επιθυμία των ζωγράφων να δημιουργήσουν μια εικονιστική ατμόσφαιρα, όπου κυριαρχούν οι αναφορές στον Διόνυσο και τον κόσμο του κρασιού.

Κ. Ρωμιοπούλου, Πτηνοὶ Ἔρωτες ὕπνῳ εὕδοντες, ΕΥΛΙΜΕΝΗ 2 (2001), 93–96

Sleeping Erotes in the National Archaeological Museum, Athens. Hellenistic plastic arts introduced a whole range of sleeping or resting types and styles; among them is the type of sleeping Eros in childlike appearance, which acquired great popularity in Roman times as a decorative statue for gardens or as a funerary statue symbolizing heroisation. The relation of Hypnos (Sleep) and Thanatos (Death) has been suggested as the reason for this subject becoming so popular in litterature and art. In this article are presented two unpublished statuettes of sleeping Eros depicting two different types of Eros, products of Attic workshops. They are dated around the end of 1st and in the 2nd cent. AD.

M.W. Baldwin Bowsky, Gortynians and others: the case of the Antonii, ΕΥΛΙΜΕΝΗ 2 (2001), 97–119

Οι Γορτύνιοι και οι άλλοι: η περίπτωση των Αντωνίων. Για τη συγγραφή μιας βάσιμης ιστορίας της κοινωνίας στη ρωμαϊκή Κρήτη θα πρέπει στο πλούσιο και διαρκώς αυξανόμενο επιγραφικό υλικό της Γόρτυνας να γίνει μια διάκριση ανάμεσα στους Γορτυνίους και τους μη Γορτυνίους. Το όνομα Ἀντώνιος, διάφοροι φορείς του οποίου είναι γνωστοί στη Γόρτυνα από τον 1ο π.Χ. έως τον 2ο μ.Χ. αιώνα, αποτελεί ενδιαφέρον παράδειγμα ρωμαϊκού ονόματος γένους με εμπορικές αλλά και πολιτικές διασυνδέσεις. Στο άρθρο αυτό δίνεται ιδιαίτερη προσοχή στην παρουσίαση δύο περιπτώσεων. Η πρώτη είναι μια πρωτοδημοσιευμένη επιγραφή από τη Γόρτυνα, η οποία αναφέρεται σε

κάποιον Αντώνιο, αρχικά κάτοικο της Κυρήνης ή της Κυρηναϊκής, πριν αναλάβει πολιτικό αξίωμα στην αποικία της Κνωσού. Η δεύτερη περίπτωση, μια επιγραφή από την Έφεσο, αναφέρεται σε έναν κατά τα άλλα άγνωστο Γορτύνιο που διετέλεσε ιερέας της λατρείας του αυτοκράτορα· η επιγραφή αυτή μας επιτρέπει να τοποθετήσουμε τη λατρεία της Ίσιδας και του Αυγούστου στο πλαίσιο της κοινότητας των εμπόρων που είχαν εγκατασταθεί στην ελληνική Ανατολή πριν από τη μάχη του Ακτίου. Η ένταξη αυτού του αναθήματος του Αντωνίου στο ιστορικό του πλαίσιο, του 2ου μ.Χ. αιώνα, μας επιτρέπει να συνδέσουμε τη συμμετοχή της Κρήτης στο Πανελλήνιον με την εξέλιξη της λατρείας του αυτοκράτορα στη Γόρτυνα και την επάνοδο της συγκλητικής διοίκησης στη Γόρτυνα. Οι Αντώνιοι που μαρτυρούνται στη Γόρτυνα —είτε είναι Γορτύνιοι είτε όχι— αντανακλούν επίσης την εκεί παρουσία πελατών και υποστηρικτών του Μάρκου Αντωνίου, του μέλους της τριανδρίας (όπως και στην Κόρινθο). Θα είναι αναγκαίο να επανεξετάσουμε την καθιερωμένη άποψη, ότι η Γόρτυνα υποστήριξε τον Οκταβιανό, ενώ η Κνωσός πήρε το μέρος του Αντωνίου.

Ι. Κολτσίδα–Μακρή, Ο θησαυρός Γυθείου *IGCH* 170, ΕΥΛΙΜΕΝΗ 2 (2001), 121–128

The Gythion Hoard IGCH 170. *IGCH* 170 was found at Gythion of Laconia in 1938. It consists of 33 silver coin–issues often occuring in Peloponnesian hoards: 1 drachm of Aegina, 32 triobols of Sikyon, 1 tetradrachm of Antiochus I Soter. The drachm issue, with two dots on the reverse incuse, dates to the second half of the 4th century B.C. The triobols follow the so–called reduced Aeginetan standard, with an average weight of about 2.6 gr. each; these can be attributed to the very last years of the 4th up to the first decades of the 3rd century B.C. The tetradrachm of Antiochus I, minted in Seleucia on the Tigris c. 278–274 B.C., is important for the chronology of the find. In a total of 23 coin hoards found in the Peloponnese, buried in the period between the middle of the 4th and the 2nd century B.C., four include Seleucid tetradrachms (17 in all); see the table in p. 124, of which 8 were minted in Seleucia on the Tigris.

It is probably an emergency hoard connected either with the troubled times of Cleomenes III's war (228–222 B.C.) or the Social War (220–217 B.C.). Thus, the period around the year 220 B.C. is *grosso modo* suggested as the possible burial date. The Gythion find is another important hoard for the dating of the triobols of Sikyon and also provides further evidence for coin circulation in the Peloponnese during the second part of the 3rd century B.C.

V.E. Stefanaki, Sur deux monnaies de bronze inédites d'Hiérapytna. Monnayage hiérapytnien et timbres amphoriques à l'époque hellénistique, ΕΥΛΙΜΕΝΗ 2 (2001), 129–142

Δύο αδημοσίευτα χάλκινα νομίσματα της Ιεράπυτνας: Ιεραπυτνιακά νομίσματα και σφραγίδες αμφορέων στην ελληνιστική εποχή. Η Ιεράπυτνα, φημισμένο λιμάνι της νοτιοανατολικής Κρήτης, κυρίως κατά τα ρωμαϊκά χρόνια, είχε ήδη αρχίσει να αναπτύσσεται στην ελληνιστική εποχή, από το τέλος του 3ου και στις αρχές του 2ου π.Χ. αιώνα. Το 145 π.Χ., μετά την κατάκτηση της γειτονικής Πραισού, έγινε η πιο δυνατή πόλη της Ανατολικής Κρήτης, όπως μαρτυρούν οι επιγραφικές και φιλολογικές πηγές.

Τα αργυρά της νομίσματα (τετράδραχμα, δίδραχμα και δραχμές), με την κεφαλή της Τύχης ως εμπροσθότυπο, κόπηκαν μετάξυ του 110 και του 80 π.Χ., και μαρτυρούν την οικονομική ευημερία της κατά την εποχή αυτή. Η ευημερία αυτή ήταν αποτέλεσμα τόσο της εδαφικής προσάρτησης της πλούσιας περιοχής της Πραισού όσο και της αύξησης της παραγωγής κρασιού στην χώρα της Ιεράπυτνας (με βλέψεις εμπορικές ή μη), όπως μαρτυρούν οι ενσφράγιστοι ιεραπυτνιακοί αμφορείς που βρέθηκαν στην Αλεξάνδρεια της Αιγύπτου, στην Καλλατία της Μαύρης Θάλασσας και στη μικρή χερσόνησο Τρυπητός στην περιοχή της Σητείας, όπου οι έρευνες έφεραν στο φως τμήμα σημαντικής ελληνιστικής πόλης.

Η μέλισσα που εμφανίζεται σε μία από τις σφραγίδες των αμφορέων ως επίσημο σύμβολο της Ιεράπυτνας, συναντάται επίσης στην οπίσθια όψη δύο χάλκινων ιεραπυτνιακών νομισμάτων, τα οποία βρίσκονται σήμερα στη νομισματική συλλογή του Ashmolean Museum στην Οξφόρδη. Ισως η επιλογή της μέλισσας ως συμβόλου να είχε σχέση με την κατάκτηση της Πραισού από την Ιεράπυτνα, καθώς ο τύπος είναι χαρακτηριστικός των πραισιακών νομισμάτων.

Η επιγραφή που εμφανίζεται στη σφραγίδα του αμφορέα με τη μέλισσα και στα νομίσματα με τη μέλισσα, είναι το εθνικό των Ιεραπυτνίων σε συντετμημένη μορφή: ΙΕ. Σε άλλες σφραγίδες ιεραπυτνιακών αμφορέων εμφανίζεται ολόκληρο το εθνικό δηλ. ΙΕ(Α)ΡΑΠΥΤΝΙ[ΩΝ] καθώς και ονόματα αρχόντων, επώνυμων ή μη (ΣΩΣΟΣ, ΠΑΣΙΩΝ). Το ίδιο συμβαίνει και στα αργυρά νομίσματα της Ιεράπυτνας με την κεφαλή της Τύχης που αρχίζουν να κόβονται μετά το 110 π.Χ. Το εθνικό των Ιεραπυτνίων δεν εμφανίζεται ολόκληρο σε κανένα νόμισμα πριν το 110 π.Χ. και τα ονόματα των αρχόντων αρχίζουν να αναγράφονται στα νομίσματα της Ιεράπυτνας μέσα στο δεύτερο μισό του 2^{ου} π. Χ. αιώνα. Πρόκειται για την περίοδο κατά την οποία η Ιεράπυτνα αρχίζει να οργανώνει τη νομισματοκοπία της για να διευκολυνθεί ο οικονομικός και διοικητικός έλεγχος. Τον ίδιο έλεγχο άσκησε, πιθανώς την ίδια περίοδο, και στην διακίνηση των προϊόντων της. Από τα παραπάνω προκύπτει ότι οι ιεραπυτνιακοί αμφορείς καθώς και τα νομίσματα με τη μέλισσα, θα πρέπει να χρονολογηθούν μετά το 145 π.Χ. και μάλιστα προς το τέλος του δευτέρου μισού του 2^{ου} π.Χ αιώνα.

M.D. Trifiró, The hoard Αρκαλοχώρι–Αστρίτσι 1936 (*IGCH* 154), ΕΥΛΙΜΕΝΗ 2 (2001), 143–154

Il tesoretto Αρκαλοχώρι–Αστρίτσι 1936 (IGCH 154). Il tesoretto *IGCH* 154, rinvenuto a Creta (località Astritsi), consta di emissioni argentee provenienti dalle città cretesi e da Cirene, Corinto e colonie, Argo, Tebe ed Egina. Sono state studiate solo le emissioni non –cretesi che ammontano a cinquantacinque monete d'argento a cui vanno aggiunti altri sei esemplari provenienti da Cirene. Questi ultimi ufficialmente appartengono ad un tesoretto rinvenuto nel 1935 a Hierapytna (*IGCH* 318), ma molto probabilmente fanno parte del nostro ripostiglio, e sono attualmente conservati insieme ad esso presso il Museo Numismatico di Atene.

Unitamente al catalogo numismatico si è fornito un breve commento relativo alle singole emissioni monetali, nel tentativo di contestualizzare le serie e di chiarirne la cronologia assoluta e relativa. Particolare attenzione è stata riservata alla monetazione cirenea nel tentativo di motivarne la presenza nell'isola di Creta, alla luce dei rapporti economici e commerciali testimoniatici dalle scarse fonti storiche. Per tali serie si è

sostenuta una cronologia «bassa» (300/290–280 a.C.) e si è proposto di identificarne lo standard ponderale con la fase intermedia del peso tolemaico adottato dal 310 a.C., probabilmente in concomitanza con un cambiamento della *ratio* tra oro e argento.

I «pegasi» provengono sia da Corinto che dalle sue colonie (Anactorion, Amphilochian Argos, Thyrrheion) e presentano simboli e monogrammi differenti, ma cronologicamente appartengono tutti al V periodo Ravel (387–306 a.C.).

Delle emissioni argive, scarsamente studiate, si è presentata la classificazione e si è proposta una cronologia molto ampia, dovendo necessariamente appartenere al periodo precedente l'ingresso della città nella Lega Achea.

David Jordan, Ψήγματα κριτικής, 4–10 [συνέχεια του άρθου «Ψήγματα κριτικής», Ευλιμένη 1 (2000), 127–131], ΕΥΛΙΜΕΝΗ 2 (2001), 155–159

Critical Trifles, 4–10 [continuation of «Ψήγματα κριτικής», Eulimene 1 (2000) 127–31].

4. On the curse tablet *DTAud* 41 (Megarid, Roman imperial), at B 1/2 and 4 read [μυ]/ριώνυ[μο]ν and [σ]τρέφῃς respectively rather than the published [τ]/ριώνυ[μο]ν and [σ]/τρέφῃς.

5. On the curse tablet *DTAud* 42 (Megarid, Roman imperial), at B 8 read τ]οὺς ἀκραπόδων (for ἀκρο–) δακτύλους rather than the published ...]ους ἄκρα ποδῶν δακτύλους.

6. On the gemstone Religions and cults in Pannonia. Exhibition at Székesférvár, Csók István Gallery, 15 May–30 September 1996 (Székesférvár 1998), no. 240 (Pannonia, III A.D.), read the personal name Φιλοσέραπιν Ἀγάθωνα rather than the published ΦΙΛΟΣΕΡΑΠΙΝΑΓΑΘΜΝΑ.

7. On the silver phylactery *BullMusComRoma n.s.* 13 (1999) 18–30 (Rome, IV/V A.D.), in line 1 read Πρὸς σεληνιαζομένους rather than the published Πρὸς σε̣λ[ήν]ην παξομένους.

8. On the papyrus phylactery *P.Oxy.* VII 1058 = *PGM* 6b (IV/V A.D.) read δῦ/{ρ}λον rather than the published δο/ῦλον in lines 3/4. The ὁ κα̣τ̣ο[(ὁ καλ̣ [*edd.*) in line 6 is no doubt from the beginning of LXX *Ps.* 90.1: Ὁ κατοικῶν ἐν βοηθείᾳ τοῦ ὑψίστου ἐν σκέπῃ τοῦ θεοῦ τοῦ οὐρανίου αὐλισθήσεται.

9. The εν της ταρταρης in lines 8/9 of the formulary *P.Carlsberg* inv. 52 (31) (VII A.D.; *Magica varia* 1) should be normalized ἐν τοῖς Ταρτάροις rather than ἐν τῆς Ταρτάρου as published.

10. On the parchment amulet *P.Louvre* inv. 7332 *bis* (VII A.D.; *Magica varia* 2 = *SB* XVIII 13602) at line 13 read τῆ̣[α]ς τ̣ε̣γ̣ο̣ύσης (for τεκούσης) (*e.g.*) Μ[[ητρὸς] Θ̣ε̣[οῦ]] rather than the published τη῾ς᾽ δ̣ε̣τ̣ε̣τ̣ο̣υσης μ[.....].

A. Agelarakis, On the Clazomenian quest in Thrace during the 7th and 6th centuries BC, as revealed through Anthropological Archaeology, ΕΥΛΙΜΕΝΗ 2 (2001), 161–186

Περί του Κλαζομενιακού αποικισμού στη Θράκη τον 7ο και 6ο αιώνα π.Χ., μέσω της Ανθρωπολογικής Αρχαιολογίας. Παρουσιάζονται τα αρχαιο–ανθρωπολογικά δεδομένα που βασίζονται στη μελέτη του ανθρώπινου σκελετικού υλικού από ανασκαφές στο αρχαϊκό νεκροταφείο των Κλαζομενίων, του ανασκαφικού τομέα «Κ» στα Άβδηρα. Τα δημογραφικά και επιδημιολογικά στοιχεία αυτού του δείγματος του πληθυσμού, όπως

υποστηρίζονται από την ταφονομική, αρχαιομετρική, φυσική ανθρωπολογική και παλαιοπαθολογική έρευνα, παρέχουν σημαντικότατα αποτελέσματα στον χώρο της Ανθρωπολογικής Αρχαιολογίας, συμβάλλοντας, σε συνδυασμό με τις καθαρά αρχαιολογικές και σωζόμενες ιστορικές πηγές, στη διαλεύκανση πολλών ερωτημάτων σχετικά για τις εμπειρίες των Κλαζομενίων αποικιστών στη Θράκη και προσφέροντας παράλληλα ένα γόνιμο πεδίο για περαιτέρω προβληματισμό και ερμηνείες όσον αφορά τα αρχαϊκά χρόνια στα Άβδηρα.

C. Bourbou, Infant mortality: the complexity of it all!, ΕΥΛΙΜΕΝΗ 2 (2001), 187–203

Παιδική θνησιμότητα: Μια πολύπλοκη υπόθεση. Η αρχαιολογική και ανθρωπολογική έρευνα μέχρι σήμερα δεν έχει στρέψει το ενδιαφέρον της στη μελέτη των παιδικών ταφών. Παρόλα ταύτα, οι ταφές των ανήλικων ατόμων μπορούν να προσφέρουν πολύτιμες πληροφορίες για τη σύνθεση της εικόνας των παλαιοτέρων κοινωνιών, καθώς τόσο το ποσοστό της παιδικής θνησιμότητας σε κάθε πληθυσμό όσο και οι διάφορες ασθένειες αποτελούν σημαντικές μαρτυρίες για το βιοτικό του επίπεδο. Τα παιδιά, πέρα από τη βιολογική τους υπόσταση προσδιορίζονται και μέσα από το πολιτιστικό πλαίσιο που ορίζει ο κάθε κοινωνικός ιστός. Έτσι, η συμπεριφορά των ενηλίκων απέναντι στα παιδιά είναι διαφορετική, ακόμα και στις περιπτώσεις του θανάτου ή της ταφής τους. Το θέμα της παιδοκτονίας (μέσα στους κόλπους της οικογένειας ή ως θυσία–προσφορά στους θεούς) έχει απασχολήσει περισσότερο τους ερευνητές, ιδιαίτερα στην προσπάθειά τους να αναγνωρίσουν τέτοιες περιπτώσεις από τα αρχαιολογικά και ανθρωπολογικά κατάλοιπα. Στην εργασία αυτή, παράλληλα με το θέμα της ταφονομίας (παράγοντες διατήρησης ή μη των παιδικών οστών) και της παιδοκτονίας στην αρχαιότητα, επικεντρώνουμε το ενδιαφέρον μας στην παιδική θνησιμότητα σε θέσεις της πρωτοβυζαντινής περιόδου (Ελεύθερνα, Γόρτυνα, Κνωσός, Κόρινθος, Μεσσήνη, Αλική). Η πρωτοβυζαντινή περίοδος παρουσιάζει ξεχωριστό ενδιαφέρον καθώς αποτελεί μία αρκετά «ταραγμένη» περίοδο της ύστερης αρχαιότητας για την οποία ελάχιστα μας είναι γνωστά. Η μελέτη των παιδικών ταφών από τις παραπάνω θέσεις μας έδωσε πολύτιμα στοιχεία για τα ποσοστά της παιδικής θνησιμότητας (υψηλότερα μετά τη γέννηση σε κάποιες θέσεις) αλλά και διάφορες μεταβολικές κυρίως ασθένειες (cribra orbitalia, Harris lines, έλλειψη βιταμίνης C).

ON THE CLAZOMENEAN QUEST IN THRACE DURING THE 7TH AND 6TH CENTURIES BC, AS REVEALED THROUGH ANTHROPOLOGICAL ARCHAEOLOGY

Preface

It was during the summer field season of 1983[1] that the author was invited to participate as the Physical Anthropologist of the excavations conducted at the Archaic burial ground, of excavation area «K», in Abdera. Under the auspices of the Greek Archaeological Service and Archaiologiki Etaireia (1, 2, 3, 4, 5, 6, 6a, 7, 8, 9, 10, 11, 12, 13, 14, 15) and in a collaborative effort with the excavator of the site, Dr. Eudokia K. Skarlatidou, Archaeologist, then with the 19th Ephoreia of Prehistoric & Classical Antiquities of Thrace, the author had both the privilege and the opportunity of working in the field and laboratory in an archaeo–anthropological project aiming to elucidate aspects of the bio–cultural condition of the first Greeks; namely the Clazomeneans from Ionia, who around 655 BC attempted to colonize and found a new settlement in Thrace (16, 17, 18, 19, 20, 21, 6, 7), the city that was to be named Abdera.

This paper, a slightly earlier version of which has been incorporated in the doctoral thesis of E. Skarlatidou,[2] is submitted as a report, part of an ongoing project investigating the Archaic anthropological record, and as a component of a larger archaeo–anthropological research endeavor, involving a diachronic study of anthropological materials recovered from the archaeological sites of Abdera, dating from the Archaic (7th c. BC) to the Late Byzantine periods (14th c. AD) of antiquity.

Historical Background, Materials, Methodology and Scope of Project

A dramatic nexus is intertwined with the Archaic component of Abdera, as endowed by historical references indicative of the struggles and difficulties faced by a colonization process striving to establish itself successfully in a new land and territory. Such reflections are characteristically recorded by Herodotus (16: 1.168) who clearly states that it was the Teans, from the neighboring city to Clazomenae in Ionia, who in 545 BC —about a century later than the Clazomenean arrival in the area of Abdera—

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[1] The sample of anthropological materials excavated during the 1982 season from the Archaic burial ground of area «K» was studied by Dr. Th. Pitsios of the Anthropological Museum in Athens and is presented accordingly in E. Skarlatidou's doctoral dissertation. The 1982 anthropological sample is currently in the process of being incorporated, by the present author, in the larger human population database of the site.

[2] Σκαρλατίδου Ε., «Από το αρχαϊκό νεκροταφείο των Αβδήρων: Συμβολή στην έρευνα της αποικίας των Κλαζομενίων στα Άβδηρα», Διδακτορική Διατριβή, (αδημοσίευτη), 2000, Τμήμα Ιστορίας και Αρχαιολογίας, Αριστοτέλειο Πανεπιστήμιο Θεσσαλονίκης.

came to the area and succeeded in rebuilding the city of Abdera, since the Clazomeneans had been repulsed from the region by the Thracians.

The design of this project, based on an environmental–population approach, proposed that a methodical cross–disciplinary study of recovered anthropological remains would carry the potential, in conjunction with the rest of the archaeological record, of deriving clearer archaeo–anthropological understandings relative to a multitude of unknown facets concerning the demographic profile and dynamics of the population involved, aspects of their genetic and epidemiological record, reflections of their socio–cultural and physical environments; clues of their history and fate in the region (22, 23, 24, 25, 26, 27, 28, 29).

Following the recovery and *in situ* inspectional as well as mensurational documentation of the human skeletal remains unearthed in both dry and cremated forms from the Archaic burial ground[3] in area «K», laboratory physical anthropological/forensic, and archaeometric analyses were carried out.[4] Subsequently, the scope of this ongoing project has been focusing on, however without being limited to, the biological growth, epigenetic variation, dietary patterns, palaeopathology and the ecology of disease distribution, as well as the reconstruction of aspects of both the physical and social palaeoenvironmental contexts of the Clazomeneans in Abdera (30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44).

Further challenging dimensions to the objectives of this project spawned when discoveries through archaeological excavations brought to light evidence of a vast spatial distribution of Clazomenean activities in Abdera, as provided through the dating of their extensive systems of fortification walls which facing the endoplains were trailing the vicinity of a natural harbor (49, 7, 7a, 8, 13), and the results derived from the analysis and relative dating methods of the artifactual assemblages recovered from the Archaic burial ground in area «K», which alone indicated a nearly 70–80 year uninterrupted use of the burial ground, from the second half of the 7th c. into the third decade of the 6th c. BC (78). These archaeological discoveries were bolstered by the unearthing of two additional Archaic period Clazomenean burial ground locations in Abdera, in the areas of excavations designated topographically as «97» and «96», excavated by Ms. Ntina Kallintzi, (45, 46), and in the area of excavations designated as «A» excavated by Ms. Lydia Kranioti (9), both archaeologists of the 19th Ephoreia of Prehistoric & Classical Antiquities of Thrace. In both of these archaeological projects the author served as the Physical Anthropologist (47, 48) and through in situ personal communication with his colleagues, it can be stated that the Archaic Clazomenean components had been superimposed, stratigraphically speaking, by 6th and 5th c. BC burials. Particularly, at the latter project, excavated by Ms. Kranioti (9), Clazomenean burials served as the basal

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[3] I wish to thank my wife Argyro Agelarakis, for her assistance in the field (especially during the excavation of jar burials) and laboratory. Her floor–plan maps, and in scale perspective technical drawing of the burial features, especially those which helped record the in situ positions of infant remains inside the jar burials, were indispensable.

[4] Analyses were carried out by the author since 1983 in laboratory and repository support areas which prefaced the construction of the Archaeological Museum at the historic village of Abdera (established in year 2000), and later at the respective Anthropology Departments' laboratories of Columbia and Adelphi Universities.

stratigraphic layer for the construction of extensive and overlapping burial tumuli of the 6th c. BC by the Teans.

Considering that the archaeological record revealed that the Clazomenean presence in Abdera was spatially extensive and elaborate as well as of a considerable duration, nearly stretching to the temporal juncture (just based on the chronological data retrieved so far from the Archaic burial ground of area «K»), and presumably overlapping with the arrival of the Teans, would it then be possible to ask new questions and to decipher, through the study of the Clazomenean anthropological remains, any esoteric information allowing for a «fine–tuning» of our understandings about their fate, and of the circumstances under which they were sustained in Abdera?

Taphonomy, Stratification and Preservation of Remains

Bearing in mind that out of the 235 burial features recovered (Fig. 1), 170 were jar burials, it was anticipated that the majority of human skeletal remains would have been relatively protected from taphonomic impacts through time and therefore preserved in a fairly good condition. Chemical analyses of sediment attributes contained within the jars, conducted in situ, indicated neutral to alkaline pH conditions. Stratification processes internal to the jar burials indicated an axonometric allocation of three distinct vertically superimposed layers of sediments, interfaced with pockets of silt and clay deposits. The two upper layers comprised sediments accumulated by infiltration deposition, postdating the interment processes, containing in addition to soils of 7.5 YR 4.5/3 hue and chroma of the Munsell soil chart values, coarse and very coarse sand (0.5–2.0 mm), granules (2.0–4.0 mm) and pebbles (4.0–60.00 mm) characteristic for their sub–angular and occasionally angular particles' shape, hence lacking physical characteristics indicative of extensive mechanical weathering. The third or basal layer contained deposits of 7.5 YR 2.5/2 silt (< 0.06 mm) and 7.5 YR 8/5 (Munsell values) sand particles of very fine (0.07 mm) to very coarse sizes as well as of marine molluscan fragments,[5] ranging in sizes, when fragmented (not remnants of human consumption), from 2.0 mm–25.00 mm, and manifesting exclusively rounded and sub–rounded sphericity indicia (typical of extensive mechanical wear through exposure to the elements), identical to the nature, attributes and characteristics of the sediment particles and ecofactual components found at the geological substrate of the burial ground. Such sedimentological data were indicative of the location of the burial ground on an active littoral setting of the Thracian shores in the northern Aegean sea during the Archaic period in Abdera —in agreement with the geological data see (49). Most anthropological remains, with isolated exceptions— as imposed by soil fauna activities, were often recovered imbedded in sedimentologic conglomerates[6] from the contexts of the third stratigraphic layers within the jars.

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[5] Genus and often species level identifications of molluscan samples have been carried out by Dr. David Reese, currently at Yale University's Peabody Museum of Natural History, and will be published in a future presentation.

[6] Based on synergistic taphonomic processes relative to: a) the anisotropic nature of the osseous components combined with the chemical microenvironment within the jars and the physical as well as chemical attributes of the encompassing sediments; b) the seasonal water table elevation fluctuations —of brackish nature; c) diachronic alluviation processes; and d) the general climatic conditions in the region.

Considering the nature of sediments and their stratification processes, as described above, it is suggested that the third or basal layer could have been: a) deposited culturally —according to burial customs for the «preparation and softening» of a burial bed within the jars (reflecting on an inorganic component of cultural stratigraphy); b) the result of a taphonomic in nature depositional processes, through infiltration, coeval with,[7] and/or just synchronous to the terminus of the Clazomenean horizon; and c) a combination of the previous explanatory alternatives. Under any circumstances, the accumulation of seashore materials as basal components of the jars' internal stratigraphy, preceded the sequential deposition, through infiltration processes, by alluvial sediments of the two upper layers. Alluviation processes were presumably, also, caused by human activities relative to deforestation —and subsequent erosion, intentional landscape changes, and intensive agriculture which later in antiquity were at least in part responsible[8] for encasing, but not deeply burring, this Archaic burial ground with alluvial sediments— also distinctly represented in the internal to the burial jars' stratigraphy by the two upper sedimentological layers. Nevertheless, while excavation procedures for uncovering and documenting, in situ, the anthropological remains and burial artifacts were often a difficult task, subsequent long term laboratory conservation and curatorial processes proved that adequate osseous and dental surfaces had preserved for in depth physical anthropological studies (28).

Burial soil samples, representing 20 jar burials, collected both through selective and random pinching techniques —especially from the silt and clayish pockets interfacing especially the third stratigraphic layer within the jars (several standard samples were also retrieved and processed), were processed in four separate bio–geological laboratories[9] for the detection of environmental and dietary pollen, as well as for the possibility of recovering additional ecofactual and intestinal macro–, and microscopic residual substances, including parasitological contents (50, 51).

Palynological analyses showed an absence of pollen counts, and only in one case severely degraded pollen grains were isolated, however, past the point of identification. While seasonality could have been a contributing factor (during late Autumn and Winter for the lack of environmental pollen), it seems plausible that the absence and/or degeneration of pollen spectra resulted from certain aspects of taphonomic implications considering the relative alkalinity and oxidation factors of sediment attributes (i.e. allowing the micro–scavenging of pollen through fungal activities). Further, all samples were found to contain non carbonized macroscopic fiber residues, debris from the small arachnoid–like plant root systems (often tracing the internal surfaces of the base of the jars), the result of germinating seeds intrusive to the jars and not the result of ante–mortem plant consumption by the individuals involved, nor of burial offerings. Additionally, charcoal micro flakes were discovered in all samples, and it is inconclusive if they represent debris resulting from coeval activities of burial habits and practices —such as from the pyres for cremating adult individuals and/or for the preparation of relative

[7] Aeolic and general weather conditions should be considered for such an exposed seashore area.

[8] For seashore changes responsible for contributing in geomorphologic modifications see (49).

[9] Laboratories where samples were processed: a) New York University's Biology Dept. Lab; b) Columbia University's Lamont–Doherty Geological Lab; c) Nebraska State University's Parasitological Lab; d) Adelphi University's Earth Sciences/Environmental Studies Lab.

burial feasts, or if they might reflect on contamination processes from later phases of antiquity in Abdera, and even of more recent historic conditions.[10] Subsequently, none of a series of 10 pertinent sediment samples prepared for parasitological studies scored positive results. It is suggested that the lack of parasitological evidence, in the form of spores or fragmented parasite body component(s) might indicate that the young individuals were not affected by parasitic infestations, and/or that such evidence was lost taphonomically.

A set of bone samples selected to represent older individuals within the Infancy I age group, namely at 2.5–3.0 years (jar burial No. K 111), and 4.5–5.5 years (jar burial No. K 156) respectively, were prepared and processed for bone isotopic fractionation for evaluating chemically dietary patterns (52, 53). Similarly to a set of nine bone isotopic trial samples, these two final samples yielded only apatite values, lacking their gelatin (collagen) components. Hence, apatite values suggested about 19% of intake of C4 plants (plants that conduct photosynthesis the C4 pathway like millet), or about a 59% component of seafood based dietary intake. Although it is recognized that the introduction of marine foods might provide difficulties in the interpretation relative to the proportionality of C4 plants in the diet, the explanatory alternatives could not be evaluated properly in the absence of preserved gelatin components. Furthermore, it should be considered that the evidence of dietary intake as reflected through the apatite values may not necessarily reflect weaned conditions for the infants,[11] therefore the isotopic results could indicate shifted proportionality of food types due to lactation processes —recognized as reprocessed carbon. Bone isotopic analysis for dietary evaluation concerning the older individuals is forthcoming.

Demographic and Palaeopathological Information

A considerable number of 203 burial contexts were excavated comprising 165 jar burials,[12] 19 cremation (pyre bed) features,[13] 16 inhumations,[14] 2 inhumation/jar

[10] Given the extensive and purposeful annual (mid July) firing processes aiming to clear the fields, consuming and partially recycling elements (N, K, P) from the residual stems of cereals and undergrowth, following the harvesting seasons, at the agricultural fields of the historic village of Abdera, where dry farming has been the mode and habit of farming as long as any local informant could recall referring to memories past down from earlier generations.

[11] Without necessarily drawing standards for comparison with the conditions of the Clazomeneans in Thrace, ethnographic information gathered by the author from the larger region of Abdera indicated that it was not uncommon for young individuals, within their second and even third year of life, to be fed through lactation, if not constantly then in a supplemental fashion by: a) their own mothers —some of whom were already caring for a younger offspring; and/or b) other female relatives or very close female friends, capable of lactating, in times of difficulty (i.e. strenuous conditions imposed by war).

[12] Of the 165 jar burials 4 were void of human remains. Hence, 161 jar burials yielded 161 primary and 9 secondary interments (4 of which were assessed anthropologically as non intrusive, whereas the remaining 5 of intrusive nature), all in dry form and the vast majority of which were age assessed as infants, as well as 17 individuals in cremated form (most probably of intrusive nature).

[13] The 19 cremation features yielded 19 primary and 1 secondary (non intrusive) cremated interments (the vast majority of which were age assessed as adults), as well as 1 secondary individual, in dry form (most probably of intrusive nature).

[14] The 16 inhumations yielded 16 primary and 2 secondary (non intrusive) interments in dry form, and 2 secondary (intrusive) cremated individuals.

burials,[15] and 1 cyst burial[16] (Fig. 1). These burial contexts yielded 231 human skeletal individuals (Fig. 2), representing the majority of the Clazomeneans interred in the Archaic burial ground of area «K» (78), and presumably reflecting on an adequate random sample of the Clazomenean population, at large, in Abdera.[17]

Of the 231 interments, 199 (86%) were assessed as primary and 32 (~14%) as secondary. Such understandings were achieved by studying for example the stratigraphic relations and contextual conditions of relative burial features, the possibilities of taphonomic impact, the nature, kind and preservation of osseous structures as juxtaposed to the main interments, further indicating that 25 of the secondary interments were under most probabilities intrusive, whereas the remaining 7 of non intrusive nature. In the latter case, the 7 burial contexts (a mere 3.5% prevalence out of 203 burial contexts) suggest the presence of family graves reflecting on consanguineous relations (4 jar burials,[18] 1 inhumation feature, and 1 cremation pyre), and/or affinity (1 inhumation feature No. 217) between individuals interred (Table 1).

Aspects of the demographic profile of this population are presented through 11 age group categories (Table 2) and 6 biological sex subgroupings (Table 2a), reflecting on the level of complexity of this collection as it pertains to preservation of skeletal structures. Hence, it was intriguing to observe that the highest prevalence of mortality was scored within the «Perinatal» and «Infancy I» age groups, which if lumped together account for 71 percentiles of the represented population (Fig. 3). It is of considerable importance to note (Fig. 4) that a clustering of detailed age assessments within the «Infancy I» age group («>Birth–6 years», also see descriptions of age groups in Table 2) would reveal progressively decreasing mortality values past the apex scored at the «greater than Birth to 6 months» age subgroup (at approximately 38%), tapering off at the «greater than 6 months to 12 months» age subgroup (at approximately 9%), and then falling to the lowest prevalence toward the terminal years of «Infancy I» namely between «4 to 6 years» (at less than 1%) (Fig. 4). Whereas the «Prenatal», and «Infancy II»– (or 6 – 12 years) age groups reveal relatively low mortality values, each at 3 percentiles, (Fig. 4 and 3), the next higher locus on the mortality curve is scored with the «Subadults» age subgroup with 6 percentiles, tapering off among the «Middle Adults», and «Late Adults», each at 4 percentiles, before the declination phase with the lowest score observed among the «Maturus» age subgroup (at 1% representation) (Fig. 3).

The bell curve outline of the mortality prevalence, as documented at this Archaic Clazomenean burial ground, with its distinct distribution of age clusters simulating a lower case of the Greek letter «λ» shape configuration could implicate several complex demographic and palaeoepidemiological arguments, especially as these might pertain to

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[15] The 2 inhumations/jar burials yielded 2 primary interments in dry form.

[16] The 1 cyst burial yielded 1 primary interment in dry form.

[17] The anthropological sample recovered in 1982, from the Archaic burial ground in area «K» during the first excavation season, (see footnote No. 1), and additional Clazomenean burials discovered at peripheral sites, as explained above, are in the process of being incorporated in the demographic inventory of the Clazomenean horizon in Archaic Abdera, and will be presented as such in a forthcoming report.

[18] In the case of burial features «K129», and «K232», age assessments based on biological growth and maturation of bones and teeth might suggest interments of twins. Nevertheless homo–, or hetero–zygosis of twins was not possible to be established archaeometrically, as of yet, through DNA replication (54).

the very young individuals of the population.[19] Hence, if in light of the mortality prevalence, as discussed above, the endurance through the «Infancy I» age group could be nearly perceived, by the eyes of the palaeopathologist, as demographic survivorship, then what were the causative agents and underlying factors which [over an archaeologically determined presence in Abdera, so far, of seven to eight decades (78)] would continue to function as early checking point mechanisms, removing such a considerable number of offspring from the Clazomenean population? Pondering on this argument, it is suggested that one should possibly not submit, at least not immediately, to generalizations referring to comparable data of approximately 50, and sometimes 50 plus percentiles of infant mortality, within the first year of life, among populations of the pre–antibiotic era, or amid current displaced peoples of preliterate tribal settings, and/or even in intercity areas —of post industrial nations, occupied by economically depressed groups. Such explanatory scenarios and comparative measures would possibly be poor models, if not ectopic and non specific, to the circumstances of the human condition in Archaic Abdera, as substantiated from the diachronic study of its anthropological collections (43, 43a, 47, 55, 56, 57), which, covering an unbroken temporal sequence from the 7th c. BC to the late 14th c. AD, never revealed any prevalence of high infant mortality but with two exceptions. These exceptions were recorded during the initial settlement activities and foundation of Abdera by the Clazomeneans, during the 7th c. BC (44), and then again at the terminal habitation phase of ancient Abdera (then called Polystylon), during the end of the Late Byzantine period, at the 14th c. AD. Therefore, the argument presented at the beginning of this paragraph, referring to aspects of the high infant mortality in Abdera, should be evaluated under the specific and idiosyncratic cultural filter of the Clazomenean group(s) which emigrating to Abdera had left behind, in Clazomenae of Asia Minor, a city well known for its cultural and techno–economic achievements, including the application of complex medical and surgical knowledge,[20] exemplary reflections of which were also verified through a masterfully executed cranial surgical trepanation on a Clazomenean female, age assessed within the «Maturus» age group who survived the surgical intervention.[21]

Further, should the palaeopathologist in the absence of precise chronological data pertaining to the exact year, or range of a few to several years, of deposition of each and every one of a considerable number of jar burials —lacking datable burial offerings,[22]

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[19] It is noted that aspects of the demographic profile of the Clazomenean population in Abdera will change, especially as this pertains to the «Adults», «Maturus», and «Senilis» age groups, as revealed by the study of the anthropological record, following the most recent discovery by Ms. Nt. Kallintzi (45, 46), of an additional Clazomenean burial ground, in Abdera, as explained above.

[20] Personal, in situ, communications with the senior director of projects Dr. Güven Bakir (Prof. Ege University), and Dr. Yaşar Ersoy (Prof. Bilkent University), as well as ABD. Bilge Hürmüzlü (Assist. Ege University), excavators of Clazomenean sites including its burial grounds.

[21] Whereas it is assessed that the cranial trepanation took place in Abdera, this also provides strong qualitative evidence, for the high level of social standing shared by female individuals in an Archaic Hellenic socio–cultural context.

[22] Relative dating of diagnostic ceramic burial offerings is much more accurate in this context than what absolute radiometric dating could possibly offer. Diagnostic ceramic dating by assessing a *terminus ante/post quem*, could narrow down, into smaller windows of 5 to 10 years within the larger known frame of the 70–80 years (78) of usage of this human activity area, the deposits of individual burials.

distribute the «Perinatal» and early «Infancy I» individuals evenly over the duration of approximately seventy to eighty (78) years— considering those interments the result of the multitude of reasons responsible for normal demographic attrition at this most sensitive biological age, or should he anticipate that the bulk of these unfortunate individuals were interred during the first year(s) of the Clazomenean colonization of Abdera when for example compounding difficulties could have been overwhelming (43, 43a, 44), for example such as of inadequate food production systems, and of most cultural mechanisms able to buffer physiological and even pathological stress not yet being in place? Should he consider the strike of one or several epidemics removing many young individuals per instance? But then, in a case of epidemics, why does one not see more victims among the other age groups, unless of course it was the matter of childhood diseases? Although such questions might seemingly be argued based on the contexts of the available palaeopathologic and epidemiologic data, there is a plethora of larger historical questions, with important implications in the milieu of anthropological archaeology discussions, which might be difficult to resolve.

While guesses remain guesses, would it ever be likely to reconstruct the demographic composition of the founders, the group of individuals (their gender diversity and age structure cohorts, their affined and consanguineous relations, their social and economical standing) who having embarked as membership of this colonization endeavor to Abdera, left behind a well organized and flourishing (save the imminent Persian threat) Ionian city with a minimum core of several hundreds of citizens? Would the nature and organization of the emigrant group be joined by an adequate number of male individuals of age for establishing themselves militarily in a land known for the polemic aptitude and might of the local Thracians? And of the materials and tools carried over, as to simulate, at a minimum, a microcosm of the technological capacities and organizational abilities of their city of origin; needed to be deployed immediately in the land of destination at Abdera? What was the nature and types of ships used and what was the course of the seafaring route, as well as the seasonality (even though one would suspect prior to late summer —after the harvest and before the trade winds of July/August) and duration of the expedition, issues relating not only to weather conditions but also on the nature and quality of dietary resources/provisions (i.e. what species, if any, of live domesticates, grain, olives, wine and water, and fruits) originally carried and/or possibly acquired or replenished en route? Did they try to settle other more preferable but hostile areas before they reached the Abdera location, or had they intended to reach Abdera directly? Did they sustain through the duration of this expedition significant and/or irreplaceable losses of materials and perishable goods and most importantly of members of their group (i.e. a leader, a priest, a medical practitioner, a midwife, a navigator, a ceramicist) due to en route attrition, piracy, polemic activities, weather conditions, old age, disease? How many were they when they arrived at the location that was to be named Abdera? And what could have been their fertility ratios,[23] and up to what age for females and males

[23] What could have been the percentage of individuals within their optimal fertility years (less than 1/3?), considering that a small group of emigrants with yet a smaller group of reproduction capable individuals could not sustain the generational future of a colony without adequate gene flow processes bolstering their gene pool —and considering the dire prevalence of their infant mortality?

respectively, and how could the strenuous conditions encountered in Abdera (ibid.,16: 1.168) have impacted such reproductive behavior, their dietary intake, their psychological and health status? Further, how active and supportive was the role of the Mother City for administering and sustaining the strategic plan of founding a Daughter City in Thrace?[24]

Turning to physical anthropology and palaeopathology in search of clues for elucidating facets of some of the questions raised above, it was very interesting to observe both macroscopically and in selected cases radiographically[25] a complete absence of dental crowns' linear enamel hypoplasias (LEH) –permanent markers of early life stress, caused by arrested and improved constitutional growth circumstances with the potential to affect dental enameloblast cells up to the terminus of biological age when dentitions are in the process of forming their enamel crown components, on both deciduous and unerupted permanent dentitions (59, 60, 61, 62, 63, 64, 65, 66). Similarly x–ray images of long bones[26] showed a lack of Harris lines (67), stress lines of impaired and improved bone growth which would appear radiographically as lucent endosteal osseous transversal linear demarcations —perpendicularly oriented to the axes of long bones. This indicated a lack of in utero (reflecting on maternal health) and postnatal biological early life stress markers, hence revealing an absence of organismal arrested and improved growth instances due to temporary and/or recurrent conditions of malnutrition, and/or under–nutrition, including the gamut of pathologies that can cause such changes, i.e. fevers, prolonged diarrheas, parasitism, infection, and trauma —when combined with inadequate dietary intake. This was considered to be important palaeoepidemiological evidence, indicating that the onset of morbid conditions, which especially affected the young Clazomeneans, brought over and/or having been born at Abdera, proved to be fatal, otherwise, had the individuals recovered the conditions of stress, they would have, under most probabilities, developed dental enameloblastic defects, and Harris' lines. Parenthetically, on an additional note to dental enamel hypoplasias, there were some cases of localized enameloblastic defects, mainly affecting deciduous and some times permanent canine labial surfaces, often bilaterally, shaped as islets —with well defined ovoid boundaries, exposing underlying dentin (in good condition) with diameters ranging from few to several millimeters. This kind of enameloblastic defect, which the author describes as of a «laccoid» kind, to distinguish it from hypoplastic pitting, has been noticeable but with a low prevalence in the region. It appears diachronically from Archaic to Byzantine Abdera (43, 43a, 47, 55, 56, 57), and in Thasos island, the earliest among a Proto–Historic Thracian population (69), and during its Classical and Hellenistic (68), as well as Palaeo–Christian populations. While

[24] On the strength of the argument (see discussion in 13) that the expedition to Thrace, might not have just been the result of a domestic Clazomenean wrangle.

[25] X–rays were taken and processed at Columbia University's School of Dental and Oral Surgery, assisted by Dr. Sidney Horrowitz, Prof. and Dean, and Dr. Irwin Mandel, Prof. and Director of Clinical Research.

[26] Cranial and infracranial x–rays were taken, processed, and evaluated at Mt. Sinai's Hospital, Department for Bone Diseases, in a joint effort with Dr. Allan Schiller, Prof. and Director of Bone Pathology, including his team of radiologists.

additional contributing factors to the causative agents of hypoplasias may be possible,[27] a case of *founder effect* should be seriously considered.[28]

Further on dentitions, a larger segment of both deciduous, and developing permanent teeth with incomplete root segments revealed enamel discolorations of 10YR 3/6 (dark red), and 5YR 4.5/3.5 (reddish brown) on the Munsell scale. Initially taken as pathological manifestations secondary to specific diseases such as infantile hepatitis, porphyria, and/or discoloration possibly caused by mastication of certain substances, perhaps with pharmaceutical benefits, the discolorations proved to be pseudo–pathological conditions of taphonomic nature since chemical, and trace element analyses[29] revealed that they were post depositional infiltrations of exogenous substances into the dental components of dentin and enamel, in the form of silicates, ferrous oxides, as well as high fluorine concentrations (23000 ppm; F in fluoroapatite).

Cranial and postcranial bones, especially of the young individuals, discerned reflections of uninhibited bone growth processes, however, marked in most cases by substantial skeletal changes due to pathologies. Their cranial bones revealed thin but intact diploic components. Vault bones showed uneven and non uniform, thin layers of subperiosteal bone apposition with distinct, sharp boundaries, deposited mainly on internal cranial tables. The post cranial skeletal remains rarely showed similar periosteal reactions. Although the degree of severity of such manifestations differed between individuals of the same age, they were considered responses to inflammatory complications probably induced by infectious conditions.

Manifestations of ectocranial porotic hyperporosis —of porotic to cribrotic sizes, affected a large number of infants without hyperostotic diploic changes. Only in rare cases were these individuals affected by hyperporotic, but non–hyperostotic, reactive lesions at their orbital roofs. Their post cranial skeletal changes showed hyperporous reactions on rib surfaces, as well as on long bones. The appendicular skeletal changes were not the result of epiphyseal ends' remodeling —due to normal growth processes, but could be attributed to a number of pathogenetic causative agents particularly to

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[27] For example the result of benign stress in the form of pressure points imposed bilaterally on the mandibular hemispheres, with emphasis on the loci of the deciduous mandibular canines, through the application of a cultural tradition of binding the body and head of new born up to their 6 postnatal months (as documented ethnographically by the author), and/or through benign stress imposed on the gingival surfaces enveloping the mandibular canines' alveolar loci by a mouth piece given to new born individuals for assistance in lactation processes, and/or for simulating one, such as in the case of a pacifier.

[28] An issue to be investigated further, but for now it seems that either such genetic information was shared by those Aegean populations, or that such information transferred through gene flow, intermarriages, originating from the population where it appears the earliest (at the Proto–Historic Thracian acropolis of Kastri in Thasos) to both Cycladic and Ionian Greeks who settled into this region —hence a founder effect contribution from the Proto–Historic Thasian population to the gene pools of the respective colonists at Abdera and Thasos. In the case of the latter scenario it would be plausible to consider that such genetic information was transferred to the Clazomeneans, interring infants with such manifestations at Abdera, from Thasos (i.e. by acquiring Thracian females from Thasos), and/or that such genetic information was common (due to shared ancestry and/or gene flow that antedated the arrival of the Greeks) among the Thracian population(s) of the mainland and the island of Thasos.

[29] Analyses conducted at Columbia University's Chemistry Department.

hemopoietic disorders, living conditions in aggregate[30] environments and of the health difficulties these conditions might entail. Such as viral contagious diseases spreading through aerosol form, these transmitted through food and water contamination (bacterial, and parasitic infections), probably of both direct and indirect contagious nature, as well as of diseases transmitted through domesticated animals (including their by–products, i.e. milk and cheese), and/or by exposure to the natural habitat of the insect vectors thriving in the wetlands and marshlands of the Nestos delta.

Further palaeopathological evaluations conducted on the skeletal remains of young individuals indicated the presence of well defined ectocranial areas of moderate hyperporous reactive bone of porotic size, especially on temporals, parietals, occipitals, and the maxillo–mandibular quadrants. Similar changes were also observed, infracranially, at preserved supero–dorsal surfaces of scapulae, and humero–ulnar disto–proximal thirds, respectively, components of the elbow joints. Such changes caused by localized hemorrhaging, is suggested, should be attributed to scorbutic conditions[31] — due to vitamin C deficiency (67a). Nevertheless, cranial bones implicated to such suggested scorbutic changes revealed, in some cases, porosity at selected endoctanial bone surfaces, specifically at the lower lateral walls and the base of the crania, for example at the cerebral faces of the temporals including the petrous bone components, the sphenoids, the occipitals, and *partes basilares*, indicating bone changes most probably correlated to compounding infectious conditions. Finally, one case of rickets (vitamin D deficiency) was diagnosed.

Childhood diseases[32] (contagious infections), anemias (i.e. acquired: of iron deficiency, and of parasitic infestation), scurvy (dietary intake inadequacies), and secondary infectious conditions (i.e. opportunistic due to aggregate living and/or lowered strength of immune systems) which seemingly extorted a heavy toll among the young[33] could have severely affected the net reproductive success and thus the long–term livelihood of the Clazomenean population in Abdera during the 7th and 6th c. BC, especially if reinforcements from Clazomenae were rare. Further, both ancient references

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[30] It is tantalizing to consider that prior to the construction of any defensive walls, relative safety from Thracian skirmishes could be attained by seeking refuge in the ships ––and possibly in safe distance from the shore, and for extended periods (few days?). In such cases it could be assumed advisable for mothers and infants to have sheltered under the decks of those ships (pending on their nature and make). Such scenarios would provide for optimal conditions of disease distribution ecology in an aggregate.

[31] Differential diagnosis processes of palaeopathologic manifestations attributed to Scurvy were discussed with Dr. Donald Ortner, Prof., National Museum of Natural History, Dept. of Anthropology, Smithsonian Institution (see 67a).

[32] Discussions on current infant epidemiology, circumstances of pathological stress, and treatments were carried out for purposes of comparisons with Dr. Dimitrios Hatzis, M.D., Ph.D., Pediatrics, Winthrop University Hospital, SUNY at Stony Brook.

[33] It is of importance to underline that based on personal, in situ, communications with the senior director of projects Dr. Güven Bakir (Prof. Ege University), Dr. Yaşar Ersoy (Prof. Bilkent University), and ABD. Bilge Hürmüzlü (Assist. Ege University), excavators of Clazomenae including its burial grounds, it can be reported that infants seemingly did not score such a high mortality prevalence in the Mother City, compared to the data derived from the Daughter City. Further, personal communication with Physical Anthropologist, Dr. Erksin Gülec, of Ankara University, knowledgeable of the Clazomenean human population excavated in Clazomenae, suggests that the infant palaeopathological manifestations, described above, were only observed at Abdera.

(*Herodotus*, *Plutarch*, and *Solinus, C.J.*) and even relatively recent ethnohistoric information (gathered by the author since 1982, through the local elder informants from Abdera and neighboring villages), concur that the peri–coastal area of Abdera was surrounded by slow moving and often stagnant water bodies as well as marshlands, presenting therefore an environment characteristic of both a typical reservoir (epidemiologically speaking) and the optimal breeding grounds for the vector transmitting malaria disease, especially before the use of modern era insecticides. The ecology of such environmental contexts with the potential to readily contribute epidemiologically to morbidity and mortality causing circumstances, imminently affecting the very young Clazomeneans at Abdera, in addition to all other compounding difficulties facing the new comers in Thrace, is suggested that it must have been a daunting experience, if not an overwhelming one, for the members of the Clazomenean population striving to settle in Thrace. Is it possible that such difficult survivorship circumstances could have easily bolstered the polemic image, aptitude and capacities of the Thracian challengers (16: 1.168), especially in the ears of non–participant members?[34]

In evaluating the post «Infancy II» skeletal remains of the «Juvenilis» to the «Older (Senilis)» age groups, representing approximately 23 percentiles of the population sample (for a break–down of the post «Infancy II» age groups, see Fig. 5) it was possible, where forensically pertinent, to retrieve data relative to biological sex (Fig. 6). Whereas the majority of individuals from the skeletal collection were of indeterminate sex — approximately 87 percent of the collection (Fig. 5), mainly due to their very young ages and immature skeletal bodies (75%) as well as due to limited preservation– including skeletally mature individuals (about 12%), only 5 percent of the skeletally mature and adequately preserved individuals were assessed as females, and 6 percent as males.

Should this skeletal collection be considered as a representative enough random sample of the Clazomenean population, given that it reflects on the largest systematically excavated Archaic burial ground in Abdera (78), then the number of males[35] owed to be insignificant for reflecting on the results of fatalities and secondary casualties (for example due to irrepressible hemorrhaging or infected wounds) caused if not by an insinuated warfare then presumably due to prolonged hostilities (16: 1.168), between the Thracians and the Clazomeneans, severe enough to render such a description by Herodotus (ibid.).[36] Further, few notable traumatic manifestations have been

[34] Also consider an additional record to (16: 7.126), of a non specific description for the location of Abdera in (16: 8.120), whereas it is clear that Herodotus visited the region as indicated by (16: 6.47), see also (16: 6.46).

[35] If one assumes, paradoxically, the entire cluster of males (15 individuals, or ~6% of the sample) to have been the victims of war against the Thracians, and even of the entire cluster of females (12 individuals, or 5% of the sample)—for the case of female casualties sustained before the construction and subsequently when outside the walls of fortification, during raids and/or ambushes conducted by the Thracians.

[36] For according to Herodotus (16: 1.168), one would be inclined to deduce that the Clazomeneans would have at best retreated (suffering dead and wounded), if not defeated (with many more casualties) from the might of the Thracians (i.e. from Thracian horsemen skirmishes, deployment of archers, sling shooters and peltasts, and/or during attempts of Clazomenean phalanx charges against the non compatible army formations or contingents thereof—with very different mentalities, habits, and ethics of war tactics and battle engagement compared to a pitched battle) just considering the potential of the Thracian strength and

documented skeletally, which would indicate healed or in the process of healing, shortly ante–mortem or peri–mortem traumatic and/or post traumatic manifestations inflicted either from a distance or through close encounter combat. Could the lack of such manifestations reflect on the adequacy of protection offered by the heavy armor and discipline of a Clazomenean phalangeal formation against the horsemen, and the bow and javelin attacks of the lightly armed Thracians?

Should there had been a war of attrition conducted by the Thracians by restricting the Clazomeneans adequate access to land (for agriculture), and/or coupled by opportunistic or seasonal plundering and ravaging of their crops,[37] hence causing them dietary stress and inadequate intake, it should be possible to detect palaeopathologically skeletal changes indicative of at least some manifestations of under–, and/or malnutrition and possibly even of marasmus due to prolonged seasonal starvation. However, even under those polemic circumstances it would be difficult to critically evaluate such conditions through anthropological archaeology, considering that the Clazomenean superiority in nautical affairs —compared to the Thracians, and their proximity to sea derived resources, in addition to the possibly of trade, if not of some opportunistic piracy, could have placed the harvest of their own local agricultural production, out of necessity, in a secondary, unreliable, position. Could this possibly explain why the stable isotopic results of bone components revealed, albeit only from the apatite contents, the possibility of such an overwhelmingly high seafood consumption, and/or of a C4 plant like millet —which parenthetically only appears again in Abdera (through diachronic bone isotopic analyses) as a dietary component[38] during the phases of the Late Byzantine periods (58)?

In evaluating an other facet of a demographic/epidemiological matter such insignificant numbers of female morbidity should not provide any substantive back up to arguments advocating for cases of epidemics, except of course of childhood diseases which mainly would have affected the young. If it would be possible to assign to females of age the labor diversity role of preferably rearing the very young, one should expect in cases of the strike of epidemic(s) to observe a larger number of females —even of older females past their reproductive years, implicated moderately in the mortality curve chart of a population in some noticeable way, showing females— due to greater exposure, as trailing the higher scores of the worst hit age group —namely that of «Infancy I». However, as reflected through the anthropological record this was not the case in Archaic Abdera.

Studies in morphocharacteristics and morphometrics of the Clazomeneans in Abdera, as usually observed among ancient Hellenic societies, revealed a discernible differentiation of skeletal anatomy and muscular imprint robustness with females being

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superiority in population numbers, access, knowledge and use of the topography and territory, while supported by an unhindered flow of «unlimited» material and/or economic resources, as well as allies.

[37] As was the case even during the early 4th c. BC in the Thracian Chersonese region requiring for the protection of the agricultural yield of nine Greek cities, the repair of existing, and further construction of walls of fortification carried out by Derkylidas (17a).

[38] Such a food–stuff appears in the human dietary intake at the end of the Middle (at a 30% prevalence) and the Late Byzantine (at 41%) periods, while both animal protein and C3 plant (wheat/barley) dietary components drop significantly.

more gracile when compared to the more robust males. Further, it was possible to assess through the skeletal record a much stricter differentiation of labor diversity between biological sexes, when comparing to the populations of the Hellenistic, Roman and Middle Byzantine components of Abdera, but simulating what has been documented among the Classical period's *Abderetes* (55). Hence, females showed the most emphasized skeletomuscular markers of habitual and occupational stress (or MHOS) (70, 71, 72, 73, 74) at their forearm bones and hands as these related most probably to domestic activities of the household and possibly of aspects of food production and preparation. On the other hand males, when juxtaposed to females, showed an influx of osteo–, and spondylo–arthropathic manifestations, immediately past the middle of their third decade of life, with much more emphasized traces of benign physiological stress imposed on trajectory loci of stress on their vertebral columns, and the structures of their upper and lower extremities, suggestive of their implication with heavy load impact, labor intensive processes and activities —including these of food production. Further, males revealed manifestations indicative of extensive locomotory behavior in non precipitous substrates.

What was uniformly peculiar, however, shared by many individuals which preserved dentitions, indiscriminately of sex, were the significant dental crown enamel cracks and flaked off enamel loci at both maxillo–mandibular labial and occlusal surfaces. These dental micro–traumatic manifestations (75, 76, 77) appeared to have been acquired not very long before the occurrence of death. They were detected to superimpose uniformly smoothed and polished dental incisal and occlusal masticatory surfaces which ante dated the onset of the micro–traumatic impacts[39]. Hence, it was possible to assess that some significant changes had occurred in the quality of preparation, if not composition, of their dietary intake, apparently after their departure from Clazomenae, where, based on non circumstantial forensically derived dental evidence, the quality of food consumed must had been prepared in a splendid fashion.[40]

These unavoidable traumatic impacts, sustained on the dental surfaces of these individuals, unable to be re–smoothed and/or re–polished, through continued wear till the incident of their death, further reflect not only of the lesser level of preparation of foods consumed, but of a larger underlying change and pressure imposed on the Clazomenean population, once in Thrace, accompanied by a lowered measure of quality of life. Such clues are suggestive of a lack of certain necessities and resources, characteristic at least of certain substructural limitations, which apparently must have been so routinely available to them before their endeavor to build and inhabit Abdera, but suspectedly not only of technological nature. And yet, as for the lowered techno–economic standards which reflect on the quality of dietary intake preparation, these were

[39] The high prevalence and specificity of characteristics identifying these manifestations affecting the dentitions of both younger and older individuals, from both biological sex groups, as well as their random distribution on both incisal and occlusal mandibulo–maxillary enamel loci, strongly suggest that they do not represent the result of a cultural habit(s) adopted while in Thrace, nor the use of the dentitions as a third hand for assistance in the conduct of manual processes requiring additional dexterity.

[40] Also based on personal, in situ, communications with the senior director of projects Dr. Güven Bakir (Prof. Ege University), and Dr. Yaşar Ersoy (Prof. Bilkent University), as well as ABD. Bilge Hürmüzlü (Assist. Ege University), excavators of Clazomenae including its burial grounds.

never to be reclaimed during the remainder of the life expectancies of these Clazomeneans.

Such explanatory scenarios for the fate of the Clazomeneans in Abdera, as reflected through Anthropological Archaeology, still only offer a mosaic picture relative to the tale–tell story encrypted in their anthropological remains. It is anticipated that continued archaeo–anthropological research in conjunction with the rest of the archaeological record, and with the incorporation of the small, yet of singular importance, additional Clazomenean population sample discovered, as explained above, will better elucidate our understandings concerning this critical period in Abdera. Further, the opportunity to compare the Archaic anthropological remains between Abdera and the Mother city of Clazomenae would offer unparalleled prospects for science and scholarship.

Thoughts on the Clazomenean Strategy, and Condition in Thrace, and Implications for the Future of Abdera

The study of the Clazomenean population sample, recovered from the Archaic period in Abdera, provides us with the unique opportunity of coaxing out of the anthropological record interdisciplinary lines of evidence reflecting on aspects of their human condition, implicit of their experiences during the colonization of the Thracian frontier. This is afforded by the saddle clues retrieved from the demographic profile (elucidating the dynamics of fertility, survivorship and mortality prevalence), the skeletal anatomy and morphology, the nature and spectra of palaeopathological distribution, as well as the archaeometric results which readily echo the mute bone tell–tale. Such unique realizations, interwoven with archaeological and historical records might allow the prospect of further inquiry concerning the human condition during those tumultuous times. Hence, whereas we will be searching, in the foreseeable future, for multiple pieces of the puzzle while fine–tuning our questions and understandings, a relatively comprehensive picture is slowly emerging, of the Clazomenean fate in Abdera. And it describes a vividly dramatic story in all respects, characteristic of the vision and spirit, as well as the relentless stamina, courage and hope of the Clazomeneans striving to assert themselves in a new territory, proximal to the land stories had claimed of the golden fleece.

One is astonished by the Herculean efforts and achievements of the Clazomeneans[41] in Abdera, possibly typical of the attributes of its mythological founder, considering that they had entered, with the purpose to claim and settle, the territory of the dreadfully polemic Thracians. Could the Clazomenean endeavor, of selecting to build in Abdera, have been an arbitrary decision, one of trial and error? Some archaeo–anthropological lines of evidence might suggest the opposite. It seems that in addition to preexisting scouting, through seafaring, for identifying appropriate anchoring locations close to the shore for barter or trade contacts between the Ionians and the Thracians, and the shared knowledge among the Greeks of the riches of Thrace, selecting to moor in the natural harbor (49) of what was to become Abdera was not a random deed, but rather a wisely calculated accomplishment.

[41] Just considering that they sustained themselves for seventy to eighty years at Abdera (78).

The littoral periphery of the inlet was not easily accessible from land[42] at its southwest and western sides —hence offering considerable natural safeguard, thanks to the barriers imposed by the Aegean sea, the inlet and its bay area, and the meandering brackish water bodies and slow moving wetlands of the delta or branches thereof of Nestos river (16: 7.126, 49), functioning as significant defense «ditches». The strength of this topographic location would not only offer an advanced stage on an anticipated effort to secure and fortify its less protected northern, northeastern and part of the southeastern sides, but also funnel the potential of Thracian attack to those aforementioned sides. Presumably then the most favorable area chosen for habitation within the inlet, to be fortified, could be completed faster,[43] with a lesser effort and/or a smaller number of human personnel.[44] Hence, the construction of the fortification walls commencing within the third quarter of the 7th c. BC (7a, 13), selectively trailed the adjoining geomorphology (ibid.) for enhancing the protection potential for the Clazomenean settlement and its ships. In addition, the location of the natural harbor happened to be at a most pivotal juncture, on the natural pathways of communication, via land, between the Thracian pericoastal plains and the northerly endoplains, made accessible by the route carved out by Nestos river through the high mountainous complex of Rodope. Finally, the inlet dominating the Thracian outlet to the Aegean was strategically positioned to also oversee the island of Thasos and its Cycladic colony.[45] Although «logical weakness» might flavor positively on this inductive assessment, it nevertheless seems that the Clazomenean colonization in the Thracian coast was both a bold endeavor emerging, at least as far as the aforementioned conditions might indicate, as an exacting art.

There is no doubt that the Clazomeneans devoted themselves in establishing the new City in Thrace, displaying no lack of confidence on their own power and organizational capacities, having no deceptions of the grave difficulties and dangers which lie ahead —facing the bitter hostilities of the local Paiones, but also staying put and

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[42] Offering some natural protection by hindering Thracian attacks from those sides.

[43] Considering the greater vulnerability of the group to enemy action before and during the construction of the walls.

[44] This might be of great importance since it is suspected, should suspicions be based on the recovered anthropological record but without neglecting to consider the traffic of people to and from Clazomenae and Abdera, that the initial group of colonists did not implicate very large numbers of people. Further, the participation of an initial larger group would be possibly advantageous in such an endeavor, but it would also require larger logistical efforts for its management. Further, we do not know specifics of the colonization decision making, implicating for example an optimal number of people Clazomenae was able and willing to part with, without sacrificing its safety and sustainability. One would assume that the departure of a smaller number of colonists, but without jeopardizing their goals, would be more feasible or preferable for Clazomenae, considering the likelihood of conflict and warfare, in Asia Minor, such as that had transpired at Clazomenae, around 600 BC, during the Lydian attack (16: 1.16). And yet, there are more questions. Was the Clazomenean dispatch a composite of a corps d'élite for such an endeavor, or an amalgam of younger and older and especially of the less wealthy —willing to risk some more in anticipation of good returns, or of the politically disfavored— as might be hinted by a version of the interpretation of the historical fragments [for such a discussion see (13)]?

[45] The archaeological record verifies, at a minimum, a lack of traded goods/ceramics between Abdera and Thasos (13), bolstering the archaeological argument that competitive affairs must have characterized their interactions viz. trade with the Thracians.

remaining charged by a phenomenal stimulation and entrepreneurial drive to achieve their quest of not only taming and harvesting the yield of a promising alien environment but hoping to cultivate and nurture constructive relations with their polemic neighbors. But even if there was solace from Mother City reinforcements there was a great price to be paid by the Clazomeneans, especially in effort and human life, for participating in the vision and strategy to claim land and territory in Thrace. And although an interpretative holistic anthropological understanding mandates under occasions of synthesis quantifiable data, based on a population approach, the significance of the individual pieces of evidence, from the perinatal to the old individuals, can hardly be placed out of focus. Hence, each and every Clazomenean laid to rest in the Archaic burial ground of Abdera reveals a qualitative tell–tale of the dreams —for many of whom these remained unfulfilled, the planning, courage, agony and misfortune, lamentation, hopes, strength and commitment for building and succeeding in Abdera. Such a qualitative view might afford us a closer nexus with the Clazomenean saga in Thrace. For it readily reflects on the struggles of a population which faced by a significant load of stress, morbidity and mortality, if destined to survive, would have to not only re–establish and re–discover certain functions of cultural mechanisms and processes,[46] but to also acclimatize and subsequently adapt, over generation time, under the new physical and social circumstances.[47] Such suggested processes and procedures must have included aspects of the intricate relationships between the relatively new settings of the Abdera climate and ecotone,[48] its catchment area and carrying capacity, agrable land and food production issues, the need for better organizational activities and communication with Ionia, safety and defense, and trade in the new geopolitical location; indispensable components of what the new City needed in order to excel.

And yet despite the relentless and unforgiving difficulties faced during their pioneering efforts in taming and building Abdera, the Clazomeneans did not give ground, nor were they vanquished, should one just consider the clear indications yielded by the archaeological and chronological data retrieved from the Archaic burial ground of area «K» (78). By securing and shielding with considerable fortification walls[49] the Archaic city of Abdera and the northwestern side of the harbor they built, they staked out, deep–rooted and founded an Ionian colony at a singularly strategic position in the heartland of Aegean Thrace, preparing for its impressive future. Further, by absorbing and defending the City from the Thracian thrust they acquainted themselves with the Thracian war tactics,[50] accumulated significant experience about preferred modes of

[46] For example by regaining aspects of their fabric of cultural habits and traditions, which were readily available in Clazomenae, (i.e. from the esoteric necessities required for the skills of a specialist(s), to the cultural mechanisms for medically buffering and alleviating physiological stress and trauma).

[47] Not only by building the walls and constructing a modern harbor, but by managing to deter and overcome the danger of malnutrition and the potential of starvation (the result of Thracian activities), piracy from the sea, and by aiming to better understand and control morbidity causing circumstances, affecting their population, by exposure to this new environment.

[48] For references on the excellent climatic conditions in the Clazomenean and Lydian region see (16: 1.142).

[49] With a construction consistency of 4 m thick walls made out of local stone, for details see (13).

[50] demystifying any legends of their might and savagery.

military operations and most probably of a political decorum[51] to be deployed in the locality, valuable information to be shared with the next generations of Ionian Greeks to endeavor to Abdera.

Hence, even if the final outcome of the Clazomenean fate in Abdera was bleaker than anticipated, although archaeo–anthropological data reveal that it was not one of annihilation, for the posterity of a «pure» Clazomenean Daughter city, one must agree that the Clazomenean vision and strategy to build in Abdera was the final victor. Whatever the political processes or negotiations which transpired between Clazomenae, Teos (16: 1.142), and the Abderetes, also implicating the leader of the Clazomenean colonization, Timisias,[52] the fact that he was honored by the Tean population who came to Abdera in 545 BC (16: 1.168), as the non mythological founder–hero of the City, signifies at a minimum symbolically, and under the emerging archaeo–anthropological data possibly even pragmatically (13, 78) —out of respect for an existing Clazomenean population in Abdera, the significance of the Clazomenean policy achievement to found Abdera.

In reality not only did the Clazomenean vision and sheer determination create an opening in the promising land of Thrace, far from the tribulations of the imperialistic reach of Persia —at least for some time— but befittingly a perfect refuge area able to receive (but also in need of such reinforcements), the entire population[53] of Teos, in times of ominous circumstances in Ionia (13a). Those circumstances, in hindsight of more than two and a half millennia, proved positive for the long term sustenance and flourishing of Abdera, although we might never know the point of view held by the Mother city of Clazomenae.[54] And yet, nowhere in the ancient sources is there to be found a notion of bitterness, of posturing, and/or antagonism between the two neighboring cities, of Clazomenae and Teos. In fact not only did the two out of the 12 Ionian cities in Asia Minor, share in common roots, legacies and traditions, but they were also destined to surmise overlapping experiences in times of war and peace and to share in far reaching endeavors from Ionia, such as those in Thrace, and Egypt (16: 2.178).

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[51] Consider the negotiations that transpired in later periods and the commercial relationships with Upper Thrace, best known by its Odrysean rulers.

[52] A *primus inter pares*, or a *persona non grata* among the colonists —for an evaluation see (13).

[53] For a discussion on the size of the Tean population seeking refuge and migrating to Abdera see (13a)

[54] It is Clazomenae that should be given the prime role of the Mother city, rather than Teos, considering that Teos was re–founded by the returning Teans from Abdera (19: 14, 644), and Pindar quoted in (13, 13a). For an extensive evaluation on this matter see (13a).

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TABLES

Burial & Individual No.	Burial Type	Age Assessment	Sex Assessment
110 Homo 1	Cremation	Young/Middle Adult	Female
110 Homo 2	Cremation	Infancy I (3–4 years+/–9 months)	Indeterminate
129 Homo 1	Jar burial	34–36 uterinal weeks	Indeterminate
129 Homo 2	Jar burial	34–36 uterinal weeks	Indeterminate
155 Homo 1	Jar burial	~/= 4–6 postnatal months	Indeterminate
155 Homo 2	Jar burial	Prenatal	Indeterminate
201 Homo 1	Jar burial	Birth–6 months	Indeterminate
201 Homo 2	Jar burial	2–3 years	Indeterminate
208 Homo 1	Inhumation	4–5.5 years	Indeterminate
208 Homo 2	Inhumation	12–18 months	Indeterminate
217 Homo 1	Inhumation	>35 years	Male
217 Homo 2	Inhumation	=/>35 years	Female
232 Homo 1	Jar burial	Near Birth–6 months	Indeterminate
232 Homo 2	Jar burial	Near Birth–6 months	Indeterminate

Table 1. Archaic Burial Ground, Area «K», in Abdera: Burials with Double Interments Suggested to Reveal Consanguineous Relationships, and/or (for Burial No. 217) Affinity

Age Group Categories	Values in Uterinal Weeks	Uterinal/Postnatal Weeks	Values in Years
«Prenatal»	20 up to 32–34 weeks		
«Perinatal» or «Near Birth»		>34–36/37 uterinal weeks to 39 uterinal weeks/Birth	
«Infancy I»			>Birth to 6 years
«Infancy II»			>6 to 12 years
«Juvenilis»–«Subadults»			>12 to <18/19 years
«Young Adults»			>18/19 to 25 years
«Middle Adults»			>25 to 35 years
«Late Adults»			>35 to 45 years
«Maturus»			>45 to 55 years
«Senilis» or «Older»			>55 to 80+ years
«General Adults», a term indicating the lumping of all three «....Adults» age group categories, used circumstantially as dictated by very limited preservation.			>18/19 to 45 years

Table 2. Age Group Categories Used for Age Assessing the Human Skeletal Individuals Recovered from the Archaic Burial Ground, Area «K», in Abdera

Biological Age Subgroupings
«Indeterminate due to preservation»: might implicate both young and old individuals in dry and cremated form
«Indeterminate due to young age»: exclusively implicates young individuals with immature skeletons
«Females»: individuals assessed forensically as females
«Females?»: an individual nearly bordering female morphological anatomy and metric indicia
«Males»: individuals forensically assessed as males
«Most probably Male»: an individual bordering the lower margin of male morpho–metric data

Table 2a. Biological Sex Subgroupings Used for Sex Assessing the Human Skeletal Individuals Recovered from the Archaic Burial Ground, Area «K», in Abdera

Fig. 1. Burial Contexts at Archaic Burial Ground, Area "K", in Abdera

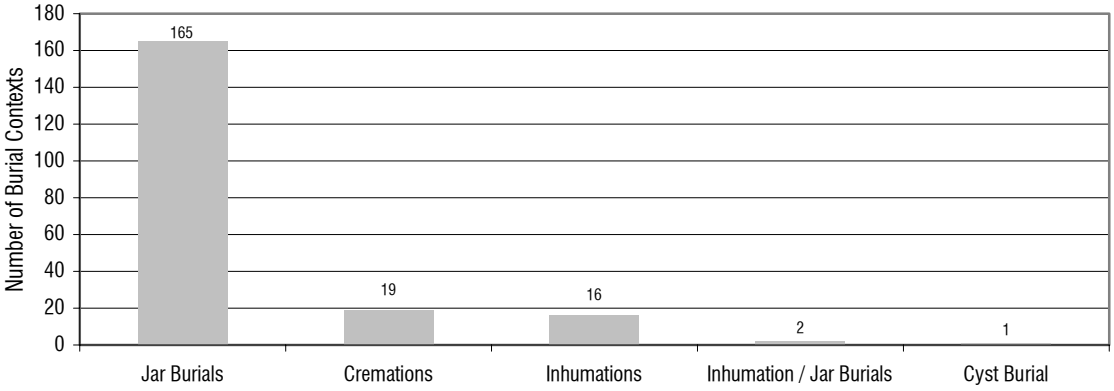

Fig. 2. 231 Skeletal Individuals Recovered from 203 Burial Features, Archaic Burial Ground, Area "K", in Abdera

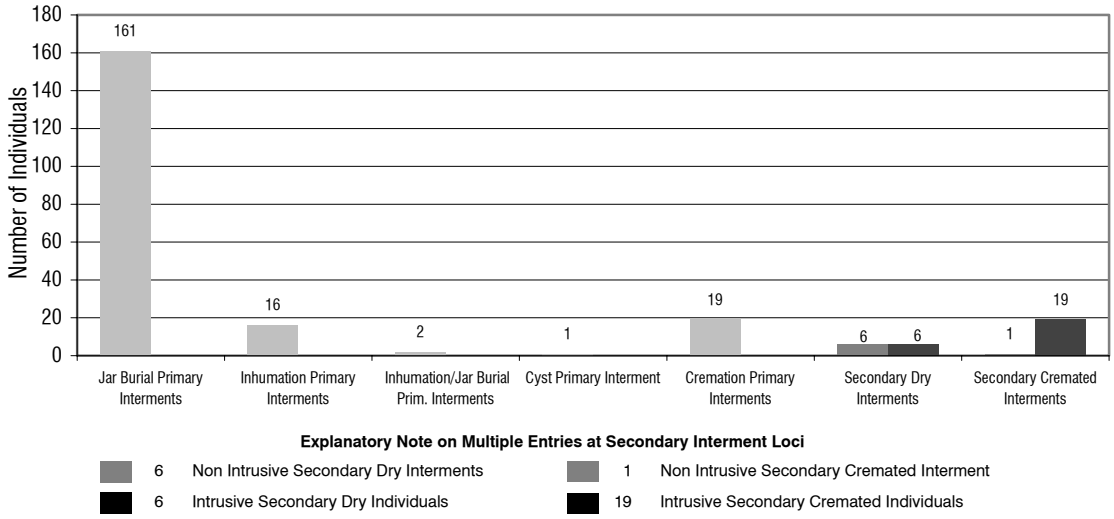

Fig. 3. Archaic Burial Ground, Area "K", in Abdera: Age Assessments By Age Group Subcategories

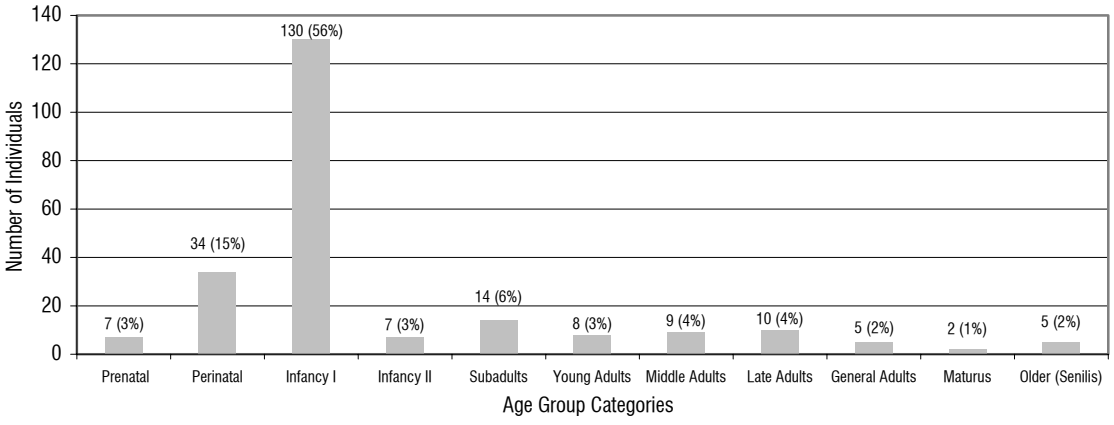

Fig. 4. Clusters between Prenatal-Infancy II Age Groups, 178 (77%) out of 231 individuals, Archaic Burial Ground, Area "K", in Abdera

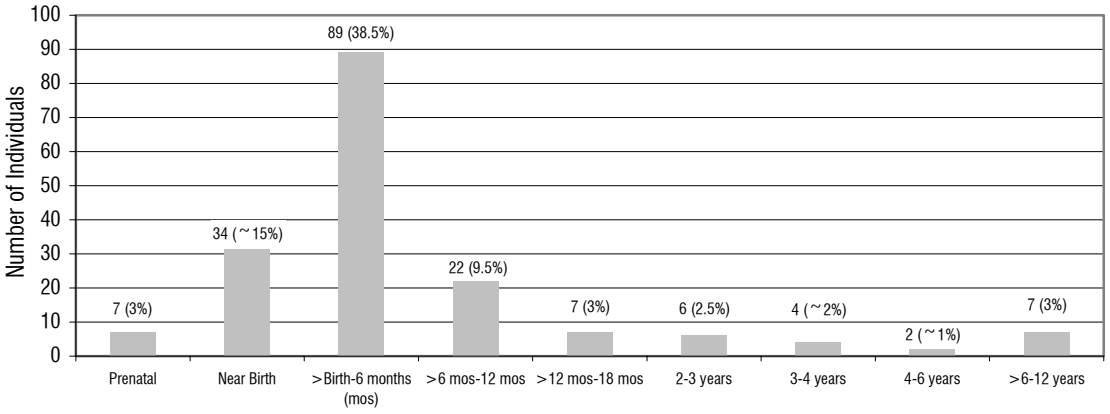

Fig. 5. Clusters between "Juvenilis" - "Older (Senilis)" Age Groups, 53 (23%) out of 231 individuals, Archaic Burial Ground, Area "K", in Abdera

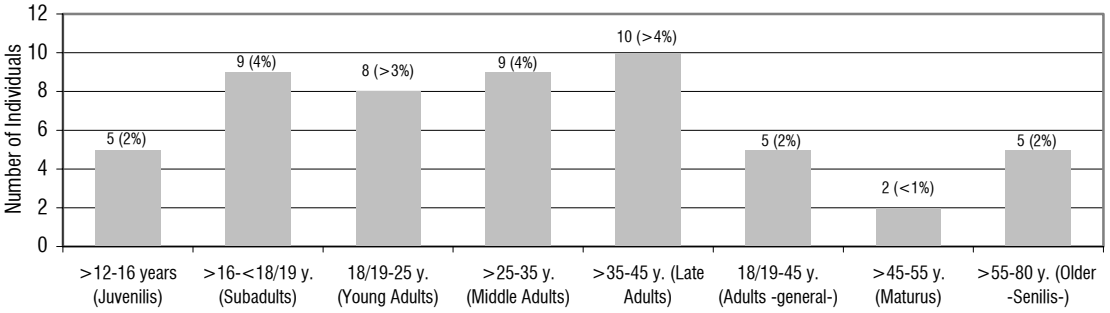

Fig. 6. Biological Sex Assessments Involving 231 Individuals Archaic Burial Ground, Area "K", in Abdera