<table>
<thead>
<tr>
<th>Title</th>
<th>Roman Bathhouses on Crete as Indicators of Cultural Transition: The Dynamics of Roman Influence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authors(s)</td>
<td>Kelly, Amanda</td>
</tr>
<tr>
<td>Publication date</td>
<td>2013</td>
</tr>
<tr>
<td>Publication information</td>
<td>Gardner, A., Herring, E. and Lomas, K. (eds.). Creating Ethnicities and Identities in the Roman World</td>
</tr>
<tr>
<td>Publisher</td>
<td>Institute of Classical Studies</td>
</tr>
<tr>
<td>Item record/more information</td>
<td><a href="http://hdl.handle.net/10197/8151">http://hdl.handle.net/10197/8151</a></td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Description</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------</td>
</tr>
<tr>
<td>NSc</td>
<td>Notizie degli scavi di antichità</td>
</tr>
<tr>
<td>OJA</td>
<td>Oxford Journal of Archaeology</td>
</tr>
<tr>
<td>PastPres</td>
<td>Past and Present</td>
</tr>
<tr>
<td>PBSR</td>
<td>Papers of the British School at Rome</td>
</tr>
<tr>
<td>PCPS</td>
<td>Proceedings of the Cambridge Philological Society</td>
</tr>
<tr>
<td>PP</td>
<td>La parola del passato</td>
</tr>
<tr>
<td>QSAP</td>
<td>Quaderni della Soprintendenza di Archeologia nella Piemonte</td>
</tr>
<tr>
<td>RE</td>
<td>Pauly's Realencyclopädie der classischen Altertumswissenschaft</td>
</tr>
<tr>
<td>REA</td>
<td>Revue des études anciennes</td>
</tr>
<tr>
<td>RÉg</td>
<td>Revue d’Égyptiologie</td>
</tr>
<tr>
<td>RMD I</td>
<td>M. M. Roxan, Roman military diplomas 1954-1977 (London)</td>
</tr>
<tr>
<td>RSL</td>
<td>Rivista di Studi Liguri.</td>
</tr>
<tr>
<td>ScAnt</td>
<td>Scienze dell’Antichità: Storia, archeologia, antropologia</td>
</tr>
<tr>
<td>SCO</td>
<td>Studi Classici e Orientali</td>
</tr>
<tr>
<td>SEG</td>
<td>Supplementum Epigraphicum Graecum</td>
</tr>
<tr>
<td>SHAJ</td>
<td>Studies in the History and Archaeology of Jordan</td>
</tr>
<tr>
<td>SIG</td>
<td>W. Dittenberger, Sylloge inscriptionum graecarum (Leipzig 1883–)</td>
</tr>
<tr>
<td>ST</td>
<td>H. Rix, Sabellische Texte: die Texte des Oskischen, Umbrischen und Südpikenischen (Heidelberg, 2002).</td>
</tr>
<tr>
<td>StEtr</td>
<td>Studi Etruschi</td>
</tr>
<tr>
<td>TAPA</td>
<td>Transactions and Proceedings of the American Philosophical Association</td>
</tr>
<tr>
<td>WorldArch</td>
<td>World Archaeology</td>
</tr>
<tr>
<td>TMArchives</td>
<td>Papyrus archives in Graeco-Roman Egypt (Leuven Homepage of Papyrus Archives), online at: <a href="http://www.trismegistos.org/arch/index/php">http://www.trismegistos.org/arch/index/php</a></td>
</tr>
<tr>
<td>ZDPV</td>
<td>Zeitschrift des deutschen Palästina-Vereins</td>
</tr>
<tr>
<td>ZPE</td>
<td>Zeitschrift für Papyrologie und Epigraphik</td>
</tr>
</tbody>
</table>

The standard abbreviations of papyri are listed in J. D. Sosin et al. (edd.), Checklist of editions of Greek, Latin, Demotic, and Coptic papyri, ostraca and tablets [Last updated 11 September 2008], at: http://scriptorium.lib.duke.edu/papyrus/texts/clist.html
ROMAN BATHHOUSES ON CRETE
AS INDICATORS OF CULTURAL TRANSITION:
THE DYNAMICS OF ROMAN INFLUENCE

AMANDA KELLY

Processing Romanization

The grafting of Roman mores onto local identities is a complex issue and gaps in the archaeological record ultimately result in misleading and biased deductions. The wide variety of models for Roman integration underscores gradations of responsiveness and exposes subtle undulations of Romanization throughout the Empire whereby Roman presence can resonate with almost unconscious societal change, establishing patterns of minimal influence.\(^1\) The term ‘Romanization’ is favoured in the present discussion, despite its fall from grace, on the basis that, despite the fluidity of merging cultures, there are certain common indicators which transcend regional variables. The complete disregard of such a classification system would be detrimental to scholarship, while causing a futile upheaval, as the defunct term would inevitably be replaced by newer, equally-biased and misleading, classifications. This has already happened, as the term Romanization has become so controversial and intricate in its definition that it is often avoided in favour of more generic processes such as acculturation, reconfiguration, negotiation, globalization, and even Creolization.\(^2\) These substitute labels do not fully express the dynamics involved, as they do not recognize that the impetus which induces these societal and cultural changes is common throughout, and that this common influence is undeniably contact (regardless of how variable the degree of reactivity) with the Roman Empire. In an attempt to interrupt such repetitive cycles, classifications will be regarded as dynamic qualifications, sensitive and receptive to the evolving concepts which they embrace. The term Romanization can be applied to such fluid and evolving processes once it allows for variations, contingent on location, topography, geology, pre-Roman cultural history, and vacillating levels of Roman receptivity (among a whole range of interconnected specifics). These processes are manifest at different times in diverse ways, but are all commonly rooted in the growth of the Roman Empire.

Classifications must recognize common themes within varying local conditions and it is only with great regard for these diverse factors that the term Romanization can be applied. Therefore, even when confronted with such sensitive variables, certain activities are clearly symptomatic of a cultural watershed. This is adequately expressed by Clarke when he states

\(^1\) Grahame 1998. \\
that ‘to engage in the bathing ritual meant to be Roman’. Consequently, this study revolves around the premise that aqueducts and bathhouses are strong indicators of Romanization.

It is precisely the public and heated nature of Roman bathing that sets it apart. DeLaine states that the Roman baths were one of the essential elements of civilized life, one which could be used as a symbol of the Romanization of conquered barbarians. Her implicit allusion to Tacitus’ Agricola indicates that the statement was aimed specifically at the Britons as barbaric, although the correlation between public bathing and Romanization is witnessed throughout the Empire. Tacitus’ famous description of the process (that has since been coined as Romanization) significantly includes frequenting the baths as one of the lures which ensnared the Britons in their reportedly blind conversion to Roman culture. Zajac concludes that ‘building baths and the adoption of Roman bathing habits by conquered peoples was an important part of the Empire’s mechanism of Romanization’.

The architecture of change; the earliest Romanizing architecture at Knossos

Evidence for pre-Roman public bathing on Crete is, at best, scanty. The potential for gymnasia at the large baths at Gortyna constitutes the only case, at least at present, for any continuum from Hellenistic to Roman within secular bathing contexts in Crete. Farrington was faced with a similar conundrum concerning the origin of the Lycian baths, since none of the Hellenistic baths of the Greek world provided any major clues for their derivation. Lycia yielded little evidence for pre-Roman bathing, that of Kolophon being the only example, while only one inscription in Lycia refers to a Hellenistic bath. Farrington also observed that the imperial bath buildings of Lycia remained unadulterated by any influences from neighbouring areas in south-west Asia Minor and that their method of construction was set firmly within the Hellenistic traditions of the local area.

3 Clarke 1998: 129.
5 Tac., Agr. 21.207.
7 La Rosa 1990: 431. The sites at Lebena and Lissos, on the south coast of Crete, are Asclepieia and, as such, ritual bathing would have constituted an important preliminary rite at these sites, as attested at other Asclepieia, notably at the sanctuary at Piraeus (Dillon 1997: 158; Melfi 2007a: 526; 2007b). While ritual bathing was strongly associated with the cult of Asclepius, it also featured at sanctuaries dedicated to Artemis (Morizot 1994: 201-16). The connection between Aphaia and Diktynna, as outlined by Kirsten, is significant in this context as they represent local assimilations of Artemis (1980: 261). Worship has been attested since the ninth century BC at the Diktynnaion Sanctuary in western Crete but clear evidence addressing the deity Artemis Diktynna only emerges in the Classical period. The continuity of cult from earlier periods at these three centres and their association with bathing in the Roman period promotes them as potentially good candidates for yielding evidence for pre-Roman bathing.
8 Farrington 1995: 43.
10 Farrington 1995: 137.
Farrington viewed the sudden architectural horizon in Lycia as the adoption of a developed sub-colonial architectural type. The type appeared as, and remained, a simplified version of a prototype which emerged in the second and first centuries BC in Campania.\(^{11}\) The argument for wholesale introduction is supported by the fact that the plan remains more or less static throughout the period of bath building in Lycia, which survived into the sixth century AD, allowing for only minor modifications catering for local bathing preferences. Waelkens observed, however, that in Lycia the circular room, which featured in Italian baths, was abandoned – perhaps as a response to simpler bathing procedures.\(^{12}\) The model has a degree of relevance for the small baths of Crete in view of the negligible Hellenistic evidence for public baths on the island and some common attributes shared by the baths of Crete and Lycia.\(^{13}\)

That certain mandatory architectural types would have been introduced by an initial small influx of elite Roman settlers early in the life of the colony at Knossos is quite plausible, as this demographic shift would have required the architectural institutions, and their associated portable accoutrements, pertaining to intrinsically-Roman daily rituals.\(^{14}\) Lolos maintains that a suite of hydraulic features (including substantial aqueduct-supplied baths and elaborate fountains) constituted architectural prerequisites for any respectable city of the Empire, particularly a colony. Similarly, Nielsen observes that baths were among the first buildings erected in the colonies and conquered towns.\(^{15}\)

The operation of a first-century AD bathhouse at Knossos is highly likely as the construction of a bathhouse would serve as a prerequisite for any level of demographic movement from Capua, especially given the delectationes associated with that particular Italian region.\(^{16}\) Livy attributes the Carthaginian army’s enjoyment of hot baths and other luxurious aspects of Campanian culture during the winter of 215 BC as one of the factors

---

\(^{11}\) Farrington 1995: 137.

\(^{12}\) Waelkens 1989: 87.

\(^{13}\) Kelly 2006b: 244-45.

\(^{14}\) A Roman colony, the *Colonia Iulia Nobilis Cnosos*, was established at Knossos c. 36 BC and 27 BC. It remained the sole colony of the joint province of Crete and Cyrenaica until the time of Hadrian (Paton 1994: 142). Dio informs us that the colony was the result of Octavian’s promise of Capuan territory to his troops in Sicily in 36 BC, in an attempt to subdue their mutinous overtones at this climacteric time; consequently, Octavian granted an aqueduct and land at Knossos to Capua to compensate for the Capuan land he gave to his soldiers (Dio 49.14.5; Strabo, *Geog.* 10.4.9). Therefore, not only was Knossos colonized but it also lost land to Capua, and Dio reveals that the Capuans still retained these holdings during his lifetime in the late second and early third century AD. Whether or not Dio’s account represents an accurate portrayal of events, the epigraphic record promotes close links between Knossos and Capua.


\(^{16}\) The Romanization of Crete was probably only marginally due to immigration from Italy, notably with the establishment of the *Colonia Iulia Nobilis Cnosos*. A small demographic influx would be expected for any colonial settlement, and the Capuan territory at Knossos may have been a relatively small holding, although it is difficult to estimate the number of Romans settled at Knossos. The colonies founded in the early second century BC at Liternum and Volturndum were settled with only 300 Roman colonists according to Livy (34.5).
behind Hannibal’s defeat, and one which was said to have had a demoralizing effect on his army. The Campanian connection, outlined in the onomastic record, is also attested architecturally elsewhere on the island, notably at Eleutherna in west central Crete where the first-century AD foundations of two town-houses in Sector I are closely comparable with the urban villas of Campania and possibly in the plan of the extra-urban villa at Makryialos on the south-east coast. Any Italianate influence evident in residential design on Crete demonstrates a deliberate Roman stamp on the landscape and potentially signals an early foundation.

It has been argued, however, that at Knossos the limited nature of first-century AD architectural evidence seems to reflect a contained presence rather than an overall change in the nature of civic society. Sweetman conjectures that the archaeological evidence from Knossos indicates that the layout and function of specific space remained unchanged from the first century BC until the first century AD. Certainly, lavish town-houses, such as the Villa Dionysus and the Corinthian House, and even more modest residences, represented by the House of the Diamond Frescoes, do not appear before the end of the first century AD. This architectural delay seems to complement a noted conservatism in the artistic profile, as observed by Sanders who did not record any major changes in stone sculpture until the late first century AD.

There remains a disparity between the architectural and ceramic evidence, as the first wave of Italian sigillata imports at Knossos dates to the late Augustan period. The associated deposits are dated through diagnostic forms, notably of Conspectus forms 18 and 22 – forms also attested in deposits in Eleutherna Sector II. The small yields of Augustan material at Knossos reported by Forster and Eiring must be offset against the fact that few Augustan contexts have been excavated and Eiring reports that only one Augustan (presumably mid-Augustan, i.e., 15-1 BC, as opposed to Late Augustan, i.e., AD 1-15) destruction deposit has been excavated. Given the dearth of excavated Augustan material at Knossos, the question of whether we have gleaned a realistic impression of the earliest Romanizing, or Roman-related, activity at Knossos is highly questionable. The overall corpus of Italian Sigillata at Knossos in 1992 amounted to 3% of all finewares in the Late Augustan period, rising to 29% in the Tiberian period, peaking in the Claudian period, when it registers at 43%, and drops to 7% in the Hadrianic era. Italian sigillata clearly became a standard import at Knossos during the first century

17 Livy 23.18. The inspiration behind the hypocaustal heating system was traditionally attributed to the natural fumaroles and hot springs of the Campi Flegrei, and the invention was popularly attributed to one Sergius Orata c. 100 BC by Pliny the Elder (NH 9.168; Fagan 1996: 56-66).
19 Altamore 2004: 262.
20 Sweetman 2007: 68.
22 Eiring 2004: 71.
AD.26 The presence of the first century AD imported fine-wares is naturally not an indication of any demographic influx and may merely represent a generic demand for Italian table-wares by the local community, but their presence in association with certain architectural contexts would suggest that the Romanizing horizon at Knossos could be earlier than so far envisaged.

Nonetheless, the majority of Roman architectural structures at Knossos have been dated to the second century AD, but, as this is also an island-wide phenomenon, this does not reflect a direct colonial footprint but rather relates to its subsequent influence resonating throughout the island as a whole. The earliest public Romanizing architectural types at Knossos have been dated overwhelmingly to the second century AD, and include at least one bathhouse, an impressive aqueduct, and a civic basilica. A second- or third-century AD date has been attributed to the civic basilica while the Roman aqueduct tract associated with the North House excavations is dated by both Hadrianic and Severan deposits.27 The theatre is impossible to date precisely due to its negligible surface remains, surviving as no more than a bend in the road. The only excavated private Roman bathsuite at Knossos has been dated to the late second and early third century AD but, as I argue here, there is much potential for earlier establishments.

Despite this much-touted second-century AD architectural horizon at Knossos, some evidence suggests that Roman architectural types were first introduced earlier than previously estimated, and, perhaps significantly, they are associated with water. Any evidence for Roman architecture at Knossos in the first century AD would present a solid indication of societal change at a relatively early stage in the life of the colony. The earliest mosaic at Knossos, the Apollinarius Mosaic, is generally dated to the late first century AD or early second century AD, although Ramsden assigns it squarely to the first century AD.28 The discovery of the mosaic was made in the northern district of the city during operations to divert a stream. Unfortunately the context was not recorded beyond a vague reference to a Roman house context.29 The Apollinaris Mosaic has been attributed a bathhouse context, purely on the basis of its aquatic motif, in lieu of any supplementary architectural evidence.30 The association relies entirely on the aquatic symbolism of the mosaic which depicts Poseidon holding his trident, riding on two harnessed hippocampi, surrounded by panels containing a series of hippocampi and dolphins, which in turn is bordered by a tendril motif with waterbirds entwined in its foliage.31

26 Forster 2009: 228.
29 Cited in Forster 2009: 11.
30 Sweetman 2003: 527.
31 The bath identification is still questionable as, while the correlation between aquatic imagery and bathhouses is strong elsewhere, aquatic imagery does not necessarily verify the activity of bathing. For example, at Kastelli Kissamou, tritons and sea-griffins are set around the impluvium of a private house (Markoulaki 1999: 199, fig. 27) and, although it may be significant that the context is associated with a water feature, the context is not associated with bathing per se.
The mosaic bears an inscription attributing its execution to Apollinaris, ΑΠΟΛΛΙΝΑΡΙΣ ΕΠΟΙΕΙ, who is thought to represent an Italian immigrant due to the frequency of the onomasticon in Campanian inscriptions. The popularity of the name in Campania led Donderer to suggest that the appellation was originally Latin and only subsequently Hellenized. Moreover, the wider epigraphic corpus reveals close links between Knossos and Campania through its frequent use of the agnomen Campanus. If, however, the Apollinaris Mosaic was executed by an itinerant craftsman from Campania, the work was clearly commissioned by a wealthy Romanized dominus, whereby the mosaic itself serves as an indicator of Roman tastes and a degree of wealth while the use of Greek denotes a private context (although the mosaic was clearly accessible for viewing through invitation).

A further discovery at Knossos also suggests the existence of a first-century AD bathhouse in the city. Architectural modifications to the Room of the Polychrome Paintings in the early second century AD incorporated displaced circular pilae (elements commonly found in Roman hypocausts) set on a new floor while other pilae and terracotta pipes were positioned on top of the walls. The presence of these reused bathhouse elements in early second-century AD renovations would intimate that, prior to this, a bathhouse existed in the vicinity. Their reuse provides a terminus ante quem in the early second century AD for the foundation and functional life of an associated bath.

Similarly, spacer pins discovered in the excavations of the Unexplored Mansion may also represent a dismantled bathing installation. The deposition of one of these spacer pins, manufactured in local clay, in a secondary context dating to the late second century AD, is again indicative of the existence of an earlier bathhouse, albeit the sequence here also allows for a second century AD construction date. The local production of this constructional element is reflective of the level of acceptance of the overall type and the wholesale adoption of this specific type of hypocaustal system.

It is interesting that Nielsen attributes the initial spread of Roman baths in the west to the influence of negotiatores (1999: 35).

Baldwin Bowsky 2004: 117-18, fn. 23; Rigsby 1976: 324; Ducrey 1969: 846-52; IC IV 295; CIL X.1433. In the broader Roman world colonial administrative systems, including legal procedures and offices, emulated the model set by Rome, thereby implementing the Latin language, names and formulas, irrespective of the language spoken in that area (Yegül 2000: 134). At Knossos, in line with widespread colonial practices, all the official inscriptions dating to the first century AD are in Latin, while all private inscriptions are in Greek (Sanders 1982: 15). Baldwin Bowsky asserts that the dominance of Latin in administrative spheres, traceable from the very earliest stage of the colony, did not exclude reasonable levels of integration, as is clearly manifest in the linguistic developments in the onomastic record pertaining to first-generation Romanized Cretans (Baldwin Bowsky 1995a: 50; 2004: 141). On expanding her investigation to include private and religious spheres, a diglossic character emerged demonstrating that while Knossos adhered to the colonial administrative model, Greek survived as the spoken language of the general populace, as expressed in religious and funerary contexts. Baldwin Bowsky notes that elsewhere on Crete the use of Latin did not feature as prevalently, as at Lyttos where Greek was used exclusively in inscriptions relating to the highest stratum of society (2006: 415).


35 For the application of spacer pins see Kelly 2006b: 240, fig. 1.

The heating system incorporating clay spacer pins quickly became the favoured model on the island (Figure 1); however, the economic considerations presented by Farrington and Coulton, whereby hypocaustal systems incorporating the clay spacer pin were reflective of cost alone, is not applicable to Crete. Its use was not a choice solely driven by financial restrictions, despite both the relatively small dimensions of the majority of the bathing installations on the island and the fact that the amphora-production industry facilitated the mass production of spacer pins throughout the island, thereby providing an established production-line onto which they effectively piggy-backed. The economic model does not explain their application in the substantial Megali Porta Baths, which Sanders estimates covered a vast area of 3,600m² and the Praetorium Baths, measuring over 1,000m², at Gortyna, the capital of the joint province of Crete and Cyrenaica, nor does it consider the more elaborate heating devices in associated complexes; notably those at Gortyna and Eleutherna (as mentioned below).

The emergence of the bath as a new monument type in Crete would have been charged with a resonance which would change the course of everyday life on both an ablutional and cultural level. As there was nothing comparable to the secular bathhouses within the pre-Roman Cretan landscape, their imprint over the Hellenistic palimpsest heralded the dawn of a new era. Their potentially wholesale introduction thereby served to advertize and promote the pleasures synonymous with Roman life, while the kudos derived from such architectural expression would have visibly heightened the status of the associated city, and its residential elites, not only on a local level, but also across Empire.
Aspirations of liberalitas

The lure of privileged Roman rank is played out in the private Cretan sphere, as is visibly attested, through a mosaic in the private bathhouse at Knossos, known as the Athlete Mosaic, which adorned the room north of a plunge-bath. The mosaic demarcates the entrance to a bathsuite which seems to represent Krencker’s parallel-row type, albeit the building is only partially excavated. Sweetman interpreted the motif as an agonistic motif or gymnasium scene which would be appropriate for its architectural setting.

The popularity of athletic competitions is also attested elsewhere on the island, specifically at Gortyna, where a group of honorary inscriptions for athletes, concerning Diogenes, a panкратiast and periodonikes, dating to c. AD 100-150, was discovered in the baths. The findspot is significant, given that the so-called Praetorium Baths were thought to have originally functioned as a bath-gymnasium.

Wardle, the excavator of the bathsuite at Knossos, reports two figures in the mosaic, and suggests that they were possibly engaged in a boxing match. The names of the figure(s) are inscribed overhead … ΚΑΟΣ ΣΑΤΟΡΝΙΝΟΣ. Wardle also notes that the name Satorninos (an alternative spelling) with the epithet Cres Gortynios, a Cretan from Gortyna, features among the records of Olympic victors for the year AD 209. Consequently, Wardle assigns a date for the construction and destruction of the house between AD 190 and AD 220. Wardle suggests that the complex (constituting a town-house with its own private bathsuite), belonged to a patron of the Olympic competitor. Problematically enough, Chaniotis clarifies that the Satorninos referred to in the victor lists was not a boxer, but the winner of the ἱστάμενον. Nevertheless, Wardle’s hypothesis, regardless of the true identity of the athlete (and, by association, the date of the complex), demonstrates that the presence of agonistic or athletic motifs in bathhouses is as potentially representative of the people who used, or indeed funded, these installations, as reflective of any activity conducted within them.

Wardle’s proposal would comply with the social dynamics relating to munificentia, liberalitas and the display of the privilege of honestiores. Aspirations of liberalitas encouraged elites to represent themselves in certain idealized styles and to identify iconographically and architecturally with specific Roman institutions. As Dixon states: ‘Their identity, as aspiring, prosperous libertini, or as established regional elites, was moulded into a Roman format and conveyed in public form through a media espousing these new values and symbols’.

42 Krencker et al. 1929.
43 Sweetman 2001: 250.
44 SEG 2001: 1137-40.
45 La Rosa 1990: 431.
46 Wardle 2000.
49 Wardle 2000.
50 SEG 2003: 188; Olympionikai 170 no. 906.
The trappings of private patronage within a private setting seem to be more soundly played out in the epigraphic record pertaining to spectacula.52 Spectacula, by nature, were ephemeral, in contrast to both their associated public inscriptions and private decoration; media which captured the moment, effectively creating a freeze-frame whereby the sponsor could be perpetually acknowledged. The means of immortalizing and advertizing your sponsorship of an athletic or gladiatorial event was a common concern for ambitious Romans. In Petronius’ Satyricon, Trimalchio, the master of kitsch and bad taste, describes the funerary monument that he is designing for himself – the sculptural ensemble includes a statue of himself accompanied by his little dog at his feet.53 It is only in the accompanying design that Trimalchio departs from regular Roman convention, whereby he insists that all of the matches of the gladiator Petraites are represented too. The jibe here is that images such as these were to remind the viewer of the individual’s munificence in sponsoring the games but Trimalchio merely likes the games – he does not fund them - and, consequently, makes a serious social faux-pas in depicting them on his tomb.

Sanders’ statement, that in Crete ‘apart from statue dedications, the largest group of civic inscriptions concerns the games’, reveals an intense interest in competitive physical display.54 Sanders did not, however, differentiate between the Roman adoption of the Greek athletic contests and gladiatorial games and venationes.55 As we might expect, at the capital, Gortyna, there is clear evidence relating to the individuals who animated the institution of the games. Epigraphic evidence found at Aghios Titos presents us with a public and permanent display of munificentia, its corresponding recognition and civic appreciation. Flavius Volumnius Sabinus, who held office for two years in Gortyna, put on special imperial games, of unprecedented length, in the form of a theatrical hunt, a venatio, in the middle of the third century.56 This ephemeral display was immortalized through the honorary public inscription, thus ensuring Volumnius’ high status (as Archiereus, or high priest, of the provincial council).

52 Satorninos was not the only celebrated athlete from Crete and an inscription from Rhodes also mentions a Cretan pentathlete who was honoured under Augustus (IG XII.i.77). At Gortyna the victories of the boxer Polos (as the abbreviation puk would indicate), are recorded in full in an inscription surviving on a fragmentary sarcophagus (IC IV 375; see Chaniotis 2004: 87, fn. 53). The details outlined on Polos’ tomb suggests that he was an athlete of high repute; with three victories at Ephesus, one at Tralles, one at Laodicea, one at Aphrodisias, and four at Gortyna. The inscription indicates that Polos was a competitor on an Aegean circuit which effectively ties Gortyna within a network linking the west coast of Asia Minor (Sanders 1982: 15).

53 Petr., Sat. 71.

54 Sanders 1982: 15.

55 For gladiatorial evidence on Crete see Kelly 2011: 77-94.

56 Di Vita 2004: 470; IC IV 305. An escalating cycle (of increasing audience expectation and responding extravagance of display) developed, whereby sponsors attempted to surpass their predecessors. Comparatives, superlatives, and unparalleled expense are characteristic of many honorary inscriptions relating to the games. Consequently, Sanders notes that Volumnius’ games were of such a scale that they required ‘special imperial permission’ (1982: 15). Certainly, overspending on gladiators seems to be the main criticism of the games among Roman writers. Dio criticized Commodus for spending all of the money that he extorted from the senators on wild beasts and gladiators (Dio 73.16.3).
Romanization reflected in bathhouse distributions and densities

In 1988 DeLaine expressed her bewilderment at the neglect of Roman bath studies in general\(^{57}\) while the underestimation of bathing in Roman Crete is attested by its cameo appearance in Nielsen’s extensive volumes on the baths of the Roman world *Thermae et Balnea: The architecture and cultural history of Roman public baths*.

In Africa, the small province consisting of Crete and Cyrenaica is well represented with respect to the latter region, with 7 baths, while Crete does not have sufficiently preserved examples.\(^{58}\)

Fieldwork, conducted as part of my doctoral thesis, confirmed a minimum of 52 examples of Roman baths on Crete constructed between the first and fourth centuries AD (Figure 2).\(^{59}\) Studies published in 1999 attributed only 35 baths (dating from the second to the fourth century AD) to Macedonia and Achaea combined.\(^{60}\) Conversely, earlier assessments conducted by Alcock cited 24 baths in Athens alone, with a further 17 associated with villas throughout Achaea.\(^{61}\) Since then the situation for Roman Greece has not greatly improved, despite notable scholarship targeting specific structures throughout the empire (as exemplified by DeLaine in her in-depth study of the Baths of Caracalla published in 1997), as surveys of baths and bathing in Greece during the imperial period remain largely unexplored subjects.\(^{62}\)

The dearth of baths attested by archaeological exploration stands in stark contrast to the picture portrayed by the ancient sources which are steeped in anecdotes relating to bathing. Yegül contends that ‘despite its rhetorical tone, the declaration by the sophist Aelius Aristides (a second-century poet and political thinker) that his home town Smyrna, one of the largest Roman ports of the Aegean, “had so many baths that you would be at a loss to know where to bathe”, is typical and probably true (Ael. Arist., 15.232)’.\(^{63}\) Lucian too, who journeyed in Ionia, Greece, Italy, and Gaul, remarked that in the second century AD bath construction was commonplace and they feature as architectural frameworks throughout his works.\(^{64}\) The high concentrations of bathhouses on Crete should prompt reassessments of counts elsewhere, since the distribution patterns demonstrate more effective Roman influence in the interior and more rural sectors, of the island than previously appreciated.\(^{65}\)

---

\(^{57}\) DeLaine 1988: 11.

\(^{58}\) Nielsen 1990: 96.

\(^{59}\) Kelly 2004; 2006b: 239, fig. 5.

\(^{60}\) Farrington 1999: 61.

\(^{61}\) Alcock 1993: 68, 125.

\(^{62}\) Farrington 1999: 57. Farrington’s article ‘The introduction and spread of Roman bathing in Greece’ is somewhat misleading in its use of the modern term ‘Greece’, as it actually refers to the provinces of Achaea and Macedonia and, therefore, does not include Crete.

\(^{63}\) Yegül 2010: 3.

\(^{64}\) Lucian, *Hippias* 4; Thomas 2007: 221-29.

\(^{65}\) Kelly 2004: 270.
Of the 52 bathhouses reported in the Cretan countryside, eight examples are potentially Trajanic, or earlier, foundations; while further Trajanic foundations may be eclipsed at a variety of later bathhouses due to their continued use. These relatively early foundations are situated at Gortyna, Knossos, Khania, Lappa, Kouphonisi, Minoa, Makriyalos, and Myrtos where they seem to be strategically placed to make the highest impact on the rest of the Cretan population and landscape.

In the past, a two-tiered model of Roman receptivity has been applied to ‘city versus countryside’ dynamics on an island-wide scale. The situation is particularly complex, as

La Rosa states that at Gortyna the first praetorium suffered a serious destruction in the second half of the first century AD and subsequently the central section was transformed into public baths before the time of Trajan (1990: 431). The potentially early bath site at Knossos is that of the dismantled bathhouse evident in the early second century AD renovations of the Room of the Polychrome Paintings, as cited above. Markoulaki dates a bath with three hypocausts in Khania to the first century AD on the basis of architectural phasing which indicates that the bath was destroyed when a stoa, which cut it, was constructed in the second century AD (1990: 440; 1991-1993: 206). The bathsuite in the villa at Myrtos was initially thought to date to the Late Antonine period (ADelt 29b², 1973-1974: 908); however, the brick-faced mortared rubble and mosaic evidence intimated an earlier construction phase attributable to the late first or early second century AD (Livadiotti Rocco 2004: 743, 745-46, figs 3a, b, and 8; Sweetman 1999: 116, no. 58, pls 88-92). Papadakis claimed that the villa at Makriyalos was Hellenistic-Roman in date, although elsewhere he also stated that the ceramic evidence covers the period from the first to the third century AD (1986: 230). Raab conjectures that the villa at Minoa was ‘Early Roman’ in date although its use, like all the sites mentioned here, continued into the late second century AD and thereafter (2001: 113). The presence of Hellenistic pottery and a Doric capital attest the longevity of the site while a Trajanic coin might pinpoint the establishment of the villa (Raab 2001: 113-14). At Kouphonisi the chronology was loosely based on the ceramic record, although the stratigraphic record was not discussed in detail in the reports; whereby the pottery from area B consisted of domestic ware and amphorae dating from first to the third century AD (Papadakis 1986: 230). At Lappa the construction of the bath under the Church of Aghios Nikolaos has been dated between the first and second century AD on the basis of its brick dimensions (Livadiotti Rocco 2004: 743, fig. 4).
demonstrated by Baldwin Bowsky who initially derived an overall pattern of backwater provincialism from the onomastic evidence only to revise her initial findings in a subsequent article.68 Clearly, the archaeological evidence promoting a more pervasive form of Romanization is growing exponentially and theories have to be modified accordingly and at the same rate. The initial model presented coastal and urban areas as progressively and Roman-receptive, and interior and rural areas as regions which displayed, in their onomasticon at least, a mixture of conservatism and progressivism. Recent reassessments allow for a more protean concept of Romanization which was inclusive and permeated throughout the island, most recently demonstrated in the findings at Eleutherna Sector I.69

An excursus on Sardinia is useful for the present study as it represents another island where a competing model of Roman influence has been applied. Tronchetti envisaged a conservative rustic community in Roman Sardinia which generally upheld inherited traditions, while new designs were approached with a degree of trepidation.70 In essence, Tronchetti presented a model of backwater provincialism, as outlined by Baldwin Bowsky.71 Rowland supported this model for the Early Roman period in Sardinia, which allowed for a ‘negotiated syncretism of the two cultures’.72 A more dramatic upheaval was reported in the large coastal cities which were occupied by the majority of the Roman elite whereby these urban landscapes were modified according to Roman customs and were furnished with edifices that were typically Roman, yet even in these cases the Semitic substratum could not be completely eclipsed.73

Dyson also claimed that in Sardinia sites were mainly focused on the coast, where they either developed from Punic foundations and therefore represent urban continuity, or represent new Roman centres, founded to serve administrative and economic needs.74 He does not, however, refer to Rowland’s dense distribution map of bathhouses when claiming coastal preference in Roman times. Rowland’s distribution map, presenting 57 bathing establishments, many of which are located in the interior of the island, indicates that baths constituted the most common Roman remains throughout Sardinia; a spread which challenges models of conservatism in the rural landscape.75 The model clearly needs revision if we combine this distribution with results from each survey conducted subsequently in Sardinia, which have considerably increased the number of Roman sites, in many survey areas by 600%.76 Dyson’s ascribing the prevalence of bath structures to the Nuragic tradition of spring cults, as much as to any Roman civic improvements, does not serve to eclipse the strength of Romanizing influence as the bathhouse distributions still

69 Themelis 2009.
70 Tronchetti 1987: 246.
72 Rowland 2001: 96.
73 Tronchetti 1987: 246.
74 Dyson 2000: 191.
75 Rowland 2001; 1981: fig. 3.
76 Rowland 2001: 105.
reflect a facet of Romanization which only serves to highlight the resilience of aspects of pre-Roman culture which are embraced by, and ultimately embodied in, the Romanized landscape of the rural hinterlands.  

Importantly for this study, the profusion of bathhouses in Sardinia demonstrates that Crete is not unique in its abundance of baths. Such bathhouse densities are not atypical and are reflective of general trends in diverse areas of the Empire. Moreover, as many baths in Sardinia represent villas, furnished with private bathsuites, their presence conflicts with Dyson’s observations that substantial remains of villas in the interiors are rare and that most of the villas on the island are coastal or located near cities and therefore constitute villae maritimae, or suburbanae. The explosion of villa sites throughout the rural interior of Sardinia illustrates the extent of the dispersal of Roman architecture throughout the interior of the island by the second century AD.

**Romanization: bathing facilities in extra urban villas on Crete**

The development of the typical villa/farmstead in the countryside surrounding major towns has long been accepted as one of the defining characteristics of Romanization. Percival noted that modern definitions of the villa nearly all include a reference to Romanization. Throughout the Roman Empire early residences did not constitute regular residences but represented a purposeful presence. Smith regarded these lavish early abodes as imported features owing nothing to indigenous society in terms of design and construction. He disregarded the importance of whether those who lived in these early villas were native to the province or incomers as inconsequential to their houses, which must have been attained through imperial channels. Downs regarded a city-country interdependence as one of the processes of urbanism which ensures a thoroughly integrated province in the Roman economy. Roman cities and towns generated satellite systems of Romanized rural centres in their hinterlands by design, as is evident in the landscape around Cosa. The villa is a testimony to the success of the Roman model which not only created urban structures but also transformed rural life.

Surprisingly, extra-urban villa sites on Crete have largely been ignored. There are at least four substantial private extra-urban villas in the published record of Crete, three of which fall within the hinterland of Hierapytna. Beyond these there are a myriad of sites which have villa potential and a litany of epigraphic and field survey evidence which would support a

---

77 Dyson 1992: 488.
78 Kelly 2004: 136, figs 5-6; 2004-2005: fig. 11.
80 Rowland 2001: 105.
82 Smith 1997: 278.
83 Downs 2000: 208.
84 Dyson 2000: 192.
Cretan landscape peppered with such establishments. Examples for such potential abodes were provided by Baldwin Bowsky who envisaged numerous establishments in the Knossian region while, more specifically, Taramelli interpreted architectural remains at Zaros as representative of the summer residence of the provincial governor of Gortyna.

(a) A model for Knossos

Baldwin Bowsky’s interesting argument that the Campanian landowners recorded in the Knossian area were the proprietors of luxury villas located along the borders of the urban area is archaeologically faint at present and the model is challenged by the fact that luxury villas have yet to be secured architecturally as penumbra sites around Knossos. Her case, however, gains ground, through her reference to Doukelis’ report of land divisions around Knossos that adhere to a limitatio corresponding to the norms of Roman centuriation (as deduced from his personal observations, aerial photographs, and maps of the Geographical Service of the Greek Army). Moreover, epigraphic evidence verifies the existence of at least one such residence; that of the duumvir Plotius Plebeius who was a descendant of one of the first colonists to be settled by the imperial procurator in Crete; P. Messius Campanus. The boundary dispute of AD 84 reveals that Plotius Plebius was a citizen of the colony who owned land adjacent to that of the Capuan territory, in that the inscription records the erection of boundary stones demarcating the Capuan territory from that of the colony at Knossos.

(b) A model for Hierapytna

If the satellite model is archaeologically faint for Knossos, it is prominently attested at Hierapytna by the presence of at least three satellite villas in the hinterland (i.e., at Myrtos, Makriyalos, and Pachyammos). Their presence establishes this polis as a wealthy power in the Early Roman period; a power which played a significant role in promoting Roman administration in the wider rural area.

The distribution of these outlying foundations indicate the extent of the territory of Hierapytna, which has been compared to the combined area of the modern eparchies of Sitia and Ierapetra (i.e., c.1,050km²); an expanse which would establish Hierapytna’s control over the isthmus and, consequently, commercial trade to the east of the island. The locations of the villas underscores an interest in commercial regulations while their private bathsuites, water supplies, and sumptuous décor establishes them as Romanizing role models for the surrounding populace. It can be posited that the purpose of these villas

85 As demonstrated by Hayden 2004a: 199-204.
87 Taramelli 1902: 102. Unfortunately, the villa has not been relocated since Taramelli’s observations (Sanders 1976: 134; 1982: 22, 155).
89 Baldwin Bowsky 2002: 81, fn. 18, 82.
AMANDA KELLY: ROMAN BATHHOUSES ON CRETE

within the Roman Cretan landscape was to secure Roman administration at key points in the hinterlands of the major cities.

In the territory of Hierapytna three evident establishments have been cited at Myrtos, Makriyalos and Pachyammos. All three are fitted with bathsuites, two with semi-circular plunge-baths, one with a shallow circular cistern or settling tank, and at least one of these is supplied by a purpose-built aqueduct; that at Pachyammos. There is also some evidence for a private-aqueduct supply at Makriyalos and a strong conjectural case can also be proposed for the villa at Myrtos, fitted as it was with a substantial bathsuite and a circular cistern.

The villa at Makriyalos, lying on an elevated spur overlooking the sea 21km to the east of Hierapytna, was perhaps too highly praised by Harrison, who was so impressed on viewing the villa that he claimed it to be virtually without parallel in size and sophistication in the eastern provinces.92 Harrison’s praise of the villa, although undeniably over-enthusiastic (especially in light of the sumptuous residences of Zeugma and Antioch to name but a few), suitably portrays the relatively elevated status and character of these residences. On a Cretan scale, private bathsuites could be quite expansive, as demonstrated at Makriyalos, where the plan of the excavated remains measuring c. 35m x 70m, almost twice that of Pachyammos, while the substantial tepidarium in the private bathsuite at Myrtos measures 5m x 22m.93

The complex at Makriyalos is comprised of 37 rooms including courtyards and an expansive bathsuite, all adorned with mosaics and marble veneer94 (Figure 3). The plan of the villa, with its large, and potentially central atrium, resembles the grand peristyyle villas of Campania.95 A partial plan of the bathsuite is included in the overall plan of the villa published in 1979.96 Only certain rooms pertaining to the bathsuite were illustrated, i.e., areas Ψ, Ω, Π, Θ, I, H, T, and Λ (room Ρ is also probably part of the bathsuite). The remaining bath block to the south east has never been represented on a published plan despite the fact that the area has been the subject of a publication.97 In 1983 Papadakis recorded terracotta pipes and open channels carrying water from cisterns to the complex and its associated gardens.98

Another partially excavated bathsuite lies 15km to the west of Hierapytna at Myrtos. The excavated area is representative of a large Roman villa, as indicated by the scale of the

---

92 Harrison 199: 272.
94 Papadakis 1983: 59.
95 See McKay 1975: 109, fig. 40, 111, fig. 41, 115-16.
96 Papadakis 1979: 408, fig. 2.
Figure 3 Plan of the villa at Markyrialos (after Papadakis 1979, 408, fig. 2)
Plate 1  Myrtos: circular cistern (photographer facing north)

Plate 2  Myrtos: road-cut exposing hypocaustal brick (photographer facing north-east)
tepidarium measuring 5m x 22m.99 Adjacent to the bathsuite, the entire depth of a brick-faced circular cistern was exposed by the modern road-cut (Plate 1). The construction incorporates exterior radial buttresses similar to those used at the massive barrel-vaulted cistern complexes at Kastelliana and Aptera (Plate 2). The cistern can be dated to the earliest phase of the bath, on the basis of the distinctive thickness of its brick,100 in relation to the thinner brick of the exposed hypocaustal area which represents a later phase. Its early date indicates that the cistern was an integral component to the original design of the villa. The expanse of the tepidarium and the presence of a circular cistern or settling tank serve as prerequisites for an aqueduct supply for the bathsuite.

Another circular cistern discovered at the urban Villa Dionysus at Knossos was located in an elevated position to the south-west of the domus (Plate 3).101 A large pipe, apparently tapping the public aqueduct, filled the tank from the west. The pipe was neatly plastered into a small fluted marble column-drum which had been hollowed out to function as a stop-cock. A lead pipe extended from this to enter the tank just above its floor level.102 The system would have supplied the domus and probably fed the lead pipes enclosed in stone-built channels below the surface of the peristyle. The presence of the stop-cock and the association of circular cisterns with aqueduct supply lines suggests that these tanks act as some form of regulatory device. All water-consuming facilities must have had a mechanism which allowed them to be shut off, although the example in the tank serving the Villa Dionysus at Knossos is the only example of a Roman stop-cock on Crete.103

In light of the discovery of this cistern, associated with a stop-cock, at the Villa Dionysus, it could be inferred that comparable cisterns at Myrtos and Minoa (and perhaps another in the Apostolaki Plot at Kastelli Kissamou) also regulated water intake for these complexes from aqueduct supply lines.104 At Minoa, in western Crete, a similar brick-faced circular cistern must have functioned as a composite part of the aqueduct water supply and it could be postulated that a stop-cock device, similar to that discovered in the Villa Dionysus, regulated the water flow (Plate 4). It could equally be proposed that future excavations would reveal a bathsuite within the Villa Dionysus which would also accord with the villa’s comparable opulence of décor, location, and size.105

100 Livadiotti Rocco 2004: 743, fig. 3a, b.
101 Sara Paton pers. comm.
103 Stop-cocks are found in North Africa, at Volubilis and Djemila, where stop-cocks are recorded regulating the water for private housing associated with tanks located along the main water supply system (Wilson 2001: 93).
104 Tzedakis 1979: 394, fig. 2, pl. 202a. In the Apostolaki Plot at Kastelli Kissamou another circular cistern is again associated with a bathsuite where it occupies the north east section of the complex. Unlike the other brick-faced cisterns, this example is constructed of uncut stone and measures 4.2m-4.3m in diameter, standing to a height of 1.14m above ground level, although its floor level was never established (Tzedakis 1979: 394, fig. 2, pl. 202a).
105 At the Roman complex at Minoa, in western Crete, the water entering the complex was allowed to settle in a large sunken circular cistern constructed of brick-faced mortared rubble. This cistern has an overall depth of 1.08m, measuring 0.20m from its inner lip down to a brick ledge from where it
Moreover, the shallowness of the cistern above the Villa Dionysus might suggest that the water could be solar heated in the summer months\(^{106}\) and this consideration may explain the shallow depth of this particular group of circular cisterns on Crete. The cisterns would therefore regulate water flow into the complexes while also potentially facilitating solar heated supplies.\(^{107}\) Despite the fact that we know that Seneca, in his old age, indulged in a warm bath supplied by water from a tank warmed by the sun,\(^ {108}\) solar-heated provisions are relatively rare. Moreover, various other elements present in several Cretan baths point to a sophistication in heating systems, including a device named the *testudines alveolorum* which feature in two of the *praefurnia* servicing *caldarium* 13 in the Praetorium Baths, a brick fire-chamber for supporting a furnace-boiler in the Small Bath at Eleuthera Sector I (personal observation Bath (the feature is also visible in Themelis’ plan, 2002, 110, fig. 138, area 60)) and a possible second such chamber in the private bath at Makriyalos in area K1 dropped a further 0.88m to its base. Its measurements are closely comparable to those of the cistern at Myrtos suggesting a common blueprint for the design on the island. The cistern at Minoa was drained by a terracotta pipeline facilitated by an opening of 0.5m on its west side (Andreadaki-Vlazaki 1983: 368, pls 162a and b). The pipeline was composed of 0.19m long pipes each with a diameter of 0.06m and a wall thickness of 0.01m (Theofanidis 1950-1951: 9).

\(^{106}\) Paton 2000: 30.

\(^{107}\) Theofanidis’ interpretation of the two incisions along the rim of the cistern at Minoa as evidence for a domed roof seems unfeasible (1950-1951: 9), although the interior rim could have facilitated a temporary cover, which could be applied when necessary.

\(^{108}\) Sen., *Epist.* 83
Plate 4 Minoa: circular cistern (photographer facing east)

(personal observation). A second-storey hypocaust in a private bathsuite at Eleutherna also constitutes a rare feature across Empire. A further Roman structure is located at Pachyammos, located on the north coast, 13km north of Hierapytna. The complex was originally excavated by Boyd in 1903 and was referred to as a villa by both Sanders and Baldwin Bowsky. The complex has not been properly examined since 1903 and, significantly, it was not mentioned in Haggis’ more recent survey of the area. The villa identification remains unconfirmed but Sanders believed that the plan of the overall structure represented the basement of a villa and interpreted its neat symmetry as reflective of domestic storage facilities. My identification of a bathsuite and a private aqueduct at the archaeologically low-profile foundations at Pachyammos (through a reassessment of Hasting’s plan and personal observations in the field) serves to elevate the status of this complex from a farmhouse to the rank of elite agricultural residence, constituting a working estate as a counterpart to the two luxury villas in the satellite zone of Hierapytna (Figure 4).

109 Di Vita 2000, li (Prætorium baths); Kelly 2006b, 236, fn. 36 (Eleutherna, Makryalos). Similar features are also found in the Large North Baths at Timgad (Yegül 1992: 369, fig. 463; 2010: 91-92).
112 Boyd 1904-1905: 14, fig. 5; Haggis 1996a: 373-432, fig. 23, see also 422, fn. 128.
113 Sanders 1982: 140, fig. 50.
Excavations of the complex in 1903 revealed a large rectangular building measuring 17m x 42.4m. In Boyd’s original plan of the complex, as drawn by Hastings, a semi-circular feature to the north-east of the complex is visible. There seems little doubt that this feature represents a semi-circular plunge-bath, identical to other Cretan examples.

---

114 Boyd 1904-1905: fig. 5.
evident in the baths at Stavromenos Chamalevri, Kato Asites, and Makriyalos. In Hastings’ plan the step into the bath is intact and the characteristic ridge along the curved wall is also evident. Perhaps most revealing is the fact that Hastings labels the feature as a cistern, which also corresponds with its proximity to the aqueduct’s terminus. Curiously, Sanders omitted these details when he republished the plan in 1982, omissions which effectively obscured the identification of this feature. A barrel-vaulted compartment, faced internally with brick over a mortared-rubble core, was visible adjacent to the area of the pool in 2002. The bricks had been blackened by fire and an air-duct was evident in the lateral wall. Its form and location, corresponding with Hastings’ plan, secure its identification as the praefurnium of a bathsuite.

The original plan, drawn by Hastings in 1903, depicts a water supply system comprising an aqueduct and settling-, or regulation-, tanks leading to the east side of the structure. It is probable that the aqueduct tapped the water from the nearby Xa Gorge as the aqueduct could not be traced in the field further south of the line of latitude marking the entrance to the gorge while locals recalled seeing its trajectory turning east towards the gorge, when it was exposed during road repairs in the area. The springs near the chapel of Aghia Anna at the head of the Xa Gorge subsequently supplied the leat of a Venetian mill which still clings to the sheer south cliff-face at the mouth of the gorge.

The identification of these hydraulic features elevates the stature of the site and it could be argued that the structure at Pachyammos (which could be classified as an agricultural villa, in line with Marangou’s model), and possibly the storage facility at Tholos, were constructed and designed to facilitate the monitoring of port traffic and the supervision of the transportation and storage of agricultural produce by a Roman (or Romanized) magistrate. The notable disparity between the plans of the establishments at Pachyammos, Marangou 1999: 270.

115 Andreadaki-Vlazaki 1991: 431, fig. 14; Sanders 1982: 70, fig. 13; Papadakis 1979: 408, fig. 2; Gerola 1908, II: 245, fig. 296.
116 See Hastings’ plan, of the Roman site at Pachyammos, after Boyd 1904-1905: 14, fig. 5.
117 Sanders 1982: 140, fig. 50.
118 Personal observation.
119 Personal observation.
120 Personal observation; Rackham and Moody 1996: 181. A 0.20m-wide channel was also recorded by both Seager (1906-1907: 115) and Soles (1973: 240) near a tomb at Vasiliki and traced 500m further south crossing the main stream running to the north coast on a bridge (Ergon 1972: 118; Zois 1992: 280). The springs at Episkopi, 4km from the Roman complex, were suggested as the water source for the Roman complex (Seager 1906-1907: 115); however, aqueduct construction in Crete generally adheres to pragmatic considerations and it is likely that the nearby water source in the Xa Gorge sufficed for the needs of the complex.
121 Marangou 1999: 270.
122 The barrel-vaulted structure at Tholos in the Bay of Mirabello in eastern Crete may represent a granary, as was initially proposed by Haggis (1996a and b); however, it is inconceivable that this small bay accommodated the large grain carriers described by Lucian (Navigium vi.5-10), as argued by Haggis (1996b: 203-07). Whether grain carriers of such size ever existed is questionable and it is likely that the Isis acted as a literary topos to provide an illusion of realism (Houston 1987: 446). Lucian’s claim that the vessels drew crowds at Athens, prompted Casson’s comparisons with the
The Roman structure at Pachyammos was strategically placed for the regulation of traffic along a major routeway running south across the isthmus towards Hierapytna, thereby effectively securing both coasts for the polis.

There is one other possible example of a satellite villa in the Hierapytnian xora in the area at Oleros midway between Hierapytna and Pachyammos where a private villa has been reported by Baldwin Bowsky; a sighting which seems to stem from Boyd’s mention of a villa in the Istron Valley (1904-1905: 13-14) and Sanders’ description of a small structure at the foot of a hill which he identifies as a bathhouse (1982: 138). He reported an apsidal room, with a diameter of 5m, lined with opus signinum and an adjacent room, measuring 9m² with a wall, belonging to a third compartment, extending west. Hayden originally contended that this structure should lie somewhere in the area of OL3, north of the Meseleri village at the base of the Schinavria ridge near a kalderim, where her survey located a rock-cut building foundation but no apsidal room. In 2004, however, Hayden reported the foundations of a brick-faced structure running for 20m and incorporating a vaulted roof in area PR1 within the Meselori Valley (2004: 274) which may very likely constitute Boyd’s villa site. Confirming its location in the field would secure administrative control over the artery of the Meseleroi Valley leading towards Priniatikos Pyrgos and the Gulf of Mirabello.

The presence of lavish bathsuites in early private Cretan villas seems to represent an integral element in Roman packaging. These sites could be classified as gateway sites, by virtue of the fact that they enable the filtering of foreign influence throughout a tiered system of sites within their broader hinterlands. The outward impetus generated by these foci may have been harnessed to a descending hierarchical scale resonating through their hinterland. The relative comfort of the private residences in Crete is notable within the biggest of the British East Indiamen which came into use at the beginning of the 19th century (1994: 124). The port at Tholos undoubtedly had importance within a regional framework as it was the main port to the isthmus and thus was monitored and facilitated by a wealthy strategically-founded agricultural villa (equipped with a bath-suite and aqueduct). Altamore classifies the building as a cistern (2004, 266-67) and it clearly conforms with the more monumental examples found on the island in terms of its plan and mode of construction (particularly the large L-shaped cistern at Aptera and the vaulted complexes at Chersonisos and Kastelliana).

123 Altamore 2004: 261.
125 Hayden 2004a: 213, 216-17, fn. 27. Hayden’s mention of a mosaic seems to be reliant on Sanders’ reference to opus signinum. Some floors of opus signinum are mosaics but not all, so the application of the term does not presuppose the presence of a mosaic. Lancaster defines opus signinum as a mixture (of mortar and crushed terracotta) used mainly for waterproofing cisterns and elements exposed to the weather and as a setting bed for stone revetment (2008: 261).
126 Comber 2001: 87.
127 This social hierarchy, or Roman receptivity, is well illustrated on the Akrotiri peninsula in western Crete where, west of the Roman complex at Minoa, a single-family residence, associated with its own private burial ground catering for multiple interments, was identified by Raab (2001: 141, figs 65-66, site LT3). As a property of some importance, it is relevant that the complex was devoid of materials that typify deliberately Roman construction elsewhere on the island (such as...
landscape but, despite their thermal indulgences, they were not merely luxury villas. They also constituted architectural role-models for the aspiring elite, and were strategically placed and economically engaged. Their seemingly detached placement is an allusion borne of architectural survival and an underestimation of the traffic they controlled; they lay embedded within an administrative network that reached far beyond the Cretan shoreline.

The placement of the villas at the crosshairs of routeways and coastal ports at an early phase of the island’s development under Rome underscores their economic, administrative, and ambassadorial roles. That this administration is routed in agricultural produce, notably wine, is strongly supported by the correlation of the southern villas with a range of amphora workshops. Amphora production sites have been located in a chain along the south-east coast stretching from Arvi, Keratokambos, Tsoutsouros, to Dermatos. Marangou noted the proximity of agricultural villas on Crete (cited at Kissamos, Chersonisos, and Dermatos) to sites of agricultural exploitation, specifically vineyards. This model is also supported by Sanders’ claims that Roman farms were spaced at 1-3km intervals skirting the edge of the Lasithi plains.

In the case of Hierapytyna, the villas constituted satellite sites radiating out from the administrative centre; the villa at Myrtos lies 15km to the west, that at Makriyalos is located 21km to the east, while the establishment at Pachyammos lies 13km to the north. The strategic placement at Pachyammos ensured the control over the breadth of the isthmus and the major routeway running north-south at this juncture. The Makriyalos villa

128 Marangou 1999: 274, fig. 2.
130 Marangou 1999: 270.
131 Sanders 1982: 19; Watrous 1982: 24, 39, 53, 55; Hayden 2004a: 206. Crete held a leading position in the wine trade for the first three centuries of Empire with Cretan amphorae representing more than a third of Aegean and Eastern imports in Ostia in the 2nd century AD (Marangou 1999, 271, 278). Already, in the mid-1st century AD Cretan wines became available to Pompeii and Herculaneum in Campania, as is attested by the amphorae shipped there bearing the insignia of Lyttos and Aptera (Marangou-Lerat 1995, 131-134; Chaniotis 1988, 75; De Caro 1992-1993, 307-312; Baldwin Bowsky 1995a, 50 and 57). Cretan amphorae also dominated the imported Roman amphora group at Marina el-Alamein, the port west of Alexandria (Tomber 1996, 48), while the presence of a Cretan wine amphora at Mons Claudianus, although its significance has been notably exaggerated, still demonstrates the dovetailing of traded commodities along well-worn trade-routes (Tomber 1996, 45). Capua’s share of territory at Knossos proved to be extremely lucrative, amassing an income of 1,200,000 sestertii per annum (Velleius Paterculus II 81, 2), which may have been generated in part through viticulture. This level of production and exportation could not be paralleled again until the Venetian period when, in the 16th century, Cretan wine enjoyed an excellent reputation, when the production of only one type of Cretan wine (among a range of vintages), known as malmsy, reached 100,000 tons, half of which was exported (Hayden 2004a, 269).
132 Seager 1904-1905: 207.
extended this control throughout the landmass, and its southern coastline, to the east while it also served as an interim post between Herapytina and the islet of Kouponisi. Their presence in the landscape is testimony to the success of Herapytina within the province. Their strategic locations, potentially early foundations, and overtly Roman fixtures were purposely designed with a Romanizing elite in mind.

The indigenous Cretan elite: a bathing establishment at Ini

In the case of Crete, an inscription discovered at Ini laying out separate bathing hours for the sexes provides a window into the nature of Romanization on the island. Four kosmoi are mentioned in the inscription in relation to the supervision of the functioning and maintenance of a bathhouse, which is referred to as a balaneion in the text. Ducrey and van Effenterre published an in-depth analysis of the inscription, noting that duties are assigned to the following kosmoi: Karanos son of Somenos, Dinokles son of Agesippos, Hieronymos son of Apollonios, Pratomenios son of Exakestas (the secretary), and the treasurers (Sokles son of Pratomedes and Philinos son of Dinokles). The name of the protokosmos heads the list, according to the usual formula, and adhering to this format, the secretary of the kosmoi group is named last.

Ducrey and van Effenterre cross-referenced names occurring in the Ini inscription with those featuring in the epigraphical records of other major centres on the island. The name Pratomenes appears in inscriptions from Chersonisos, Lato, and Hyrtakina, while the name Exakestas occurs at Knossos, while the name Sokles is evident at Olous. Somenos appears at both Pyloros and Arkades where it is also associated with the patronym Karanos. Ducrey and van Effenterre posited that the common patronym suggests that both inscriptions are referring to the same family and, consequently, that the kosmos, Dinokles, was the father of one of the stewards, Philinos Dinokleos. Moreover, they also suggested that the protokosmos, Pratomenios, was the uncle of the other steward, Sokles Pratomedous.

133 Herakleion Museum no. 346; SEG XXVI.1044; Ducrey and van Effenterre 1973: 281.
135 Ducrey and van Effenterre 1973. It is clear that the kosmoi supervised the upkeep and functioning of the baths but those who actually performed the associated menial tasks, such as cleaning the baths, is unknown. The discovery of a set of three iron-hinged manacles, which had been cut open, in a cavity in the face of the wall of the public bath at Knossos may be significant in this regard (ARepLond 1993-1994: 75-76). Trajan characterized the task of cleaning the baths as tantamount to punishment, akin to cleaning the sewers, probably due to the fact that most hypocaust cavities are only one meter high (Fagan 1999: 188; Pliny, Epist. 10.32 2).
137 IC I vii 15, I xvi 33, IC II xv 8a.
138 IC I viii 40.
139 IC I xii 44.
140 IC I xxv 2.
141 IC I v 36.
provided that Pratomenios and Pratomedes are, as the patronym suggests, two brothers, presumably from one of the elite families on Crete. The same observations can be applied to the inscription from Aphrati where one of the ergepistatai, Kallicrates son of Aristokles, could be the son of the Aristokles Apollonida, also mentioned in the list of kosmoi.

The homonymic evidence conforms well with Aristotle’s observations that the Cretan kosmoi were chosen from certain clans and privileged hereditary groups. Willetts suggested that although this kind of closed oligarchy was to some extent modified, at least in certain cities, it is likely that the Cretan cities were governed under aristocratic regimes until the island passed under the control of the Roman imperialists. The onomastics in the inscription at Ini indicates that the integrity of the preceding system survived under Roman rule; a continuum which seems to contradict Strabo’s claim that few of the famous nomina of the Cretans survived as they lived according to the diatagmata or decrees of the Romans.

The inscription attests that the traditional elite Cretan families of the Hellenistic period were reinstated as mediators in the Roman period thereby endorsing a fluid transfer of overall power. As such, the Ini inscription demonstrates the manner in which Roman culture merged with the indigenous Cretan traditions, with evidence that, at least in some cases, the traditional local elite acted as mediators and defenders of the habits of Rome; the magistrates who superintended the baths were all Cretan, i.e., none of their names are Roman or Romanised. The inscription demonstrates that in Crete the traditionally elite families were promoted as the instigators and mediators of Roman order and activity on behalf of the indigenous population, a dynamic attested throughout provincial administration.

Yet Downs argues that if the indigenous elite welcomed, and even mediated on behalf of, a Roman presence, it does not automatically guarantee that the remainder of the population, who had relatively less to gain, responded in kind. The inscription at Ini is testimony to the broader population’s acceptance of this Roman constitution by virtue of the fact that it constitutes a bath timetable outlining the schedule for male and female bathing thereby illustrating the public nature of the bathing therein. The bath, despite being referred to as a balaneion in its associated inscription, is clearly a public facility as can be deduced by the need for such a timetable and by the fact that the structure is supervised and maintained by the kosmoi.

Such broad participation in bathing refutes

---

144 IC I v 5.
145 Arist., Politics II vii 5-6.
146 Willetts 1969: 156.
147 Strabo, Geog. 10.4.22; Woolf 1994: 122-23
149 Downs 2000: 207.
150 Ducrey and van Effenterre 1973: 287, n.13. The term is thought to correspond to the Latin balneum (Staccioli 1955: 391-401), general definitions of which often generate false images of flimsy dilapidated structures with no clear symmetry whose associated communities only aspire to transform these paltry installations into thermae; however, the confusion in dealing with precise terminologies is exemplified by Dio who refers to the baths of Agrippa and of Titus as both thermae and a balaneion respectively (54.29.4; 66.25.1).
claims, commonly argued, that discord arose between the ‘upwardly mobile’ indigenous elite and the remainder of the native population elsewhere in the Empire.\footnote{See Hingley 2005: 42-43.}

The inscription from Ini outlines the separate bathing hours for the sexes indicating that women would bathe from (such) an hour to (such) an hour while the men from (such) an hour.\footnote{Ducrey and van Effenterre 1973: 281.} The specific figures are not cut in the stone and were presumably painted on to allow for changes to the prescriptions according to the season.\footnote{Ducrey and van Effenterre 1973: 284.} As the Ini inscription distinguishes between male and female bathing times, the inscription has been attributed to the Late Antonine period, possibly to the reign of Marcus Aurelius, when measures for the segregation of bathing were reportedly reinforced, thereby highlighting Crete’s adherence to imperial policies.\footnote{Ducrey and van Effenterre 1973: 281, 284. The practice of mixed bathing was reportedly prohibited by the emperors Hadrian (Scriptores Historiae Augustae 18.10), Marcus Aurelius (Scriptores Historiae Augustae 23.8; Dio LXIX viii 2) and Severus Alexander (Scriptores Historiae Augustae 24.2; Bowen Ward 1992: 142; Wikander 2000: 572; Yegül 2010: 33); but caution should be taken in transposing such sources into architectural chronologies. Even claims that the practice was largely restricted to courtesans and condemned by respectable citizens is a point of heated debate. During the reign of Caracalla the mixing of the sexes was supposedly re-introduced due to popular demand, and the baths, which were usually only used during the daytime, were open all night but any such liberties were apparently short-lived since women were forbidden access to the \textit{thermae} by the Council of Laodicea in AD 320, although the reimposition of such a prohibition by John Chrysostom at the end of the 4th century AD suggests a lapse in adherence to these regulations.} The segregation of the sexes could be achieved in two ways: through the use of a timetable, as at Ini, or through the use of alternative establishments.

The fixing of a timetable for the opening hours of a public building is a regular occurrence in Roman society, as attested by the regulations of the library of Pantainos in Athens which reveal that the library was open from the first hour until the sixth.\footnote{Ducrey and van Effenterre 1973: 287.} The regulation of a public bath, however, differs appreciably from that of a public library as the baths’ opening hours were correlated with the availability of running water which could be regulated with the use of a stop-cock.\footnote{Wilson 2001: 93.}

The Ini inscription suggests a model for the workings of the bath whereby the presence of such a timetable implies that there was no need for the architecture to demonstrate distinct areas for men and women. It was usual for women to bathe first, probably in the morning or in the early afternoon, while men entered the same rooms later after they had been vacated. A similar inscription pertaining to a small bathhouse at Vipascum in Portugal bears testimony to this sequence in outlining the bathing times for men and women.\footnote{CIL II.5.181; Yegül 2010: 33-34; Laurence \textit{et al.} 2011: 204.} The fact that the Ini inscription allows for a degree of change in the hours assigned for the bathers even makes it feasible for the baths to open overnight.

Ducrey and van Effenterre demonstrate convincingly that the Ini inscription establishes that the local governing elite continued in their traditional role as \textit{kosmoi}
during the Roman period, yet it also demonstrates that their spheres of concern widened to embrace monuments emblematic of the Empire including baths and aqueducts (1973). If the administrators are of old Cretan stock, their role now pertains to a thoroughly Roman institution. A review of the traditional tasks associated with the Cretan kosmoi is informative with regard to the tasks attributable to the magistrates at Ini. An inscription from Arkades concerning the reconstruction of the sanctuary of Artemis at Aphrati (IC I v 5) is instructive in this regard as its format is identical to that of the inscription from Ini. The inscription from Aphrati mentions ergepistatai (Thomas 2007: 242) in its list of kosmoi and it is likely that they had a similar function as the treasurers of the Ini inscription; by inference, it seems that the expertise of the magistrates at Ini was not only financial, but very probably practical. They were accountable for the city’s expenses and also responsible for the supervision of the public works. It is not known why they have a distinct title in the sanctuary inscription. The role of these two magistrates is clear, adhering closely to the function of an aedile, governing the management of the surveillance of baths, fountains, roads, markets, etc.; tasks which were usually attributed to the group of kosmoi called eunomia in other sites in Crete, notably Lato.

At Ini, Ducrey and van Effenterre believed that this supervisory role incorporated the care of the aqueduct and proposed that the original text in the hiatus at line 3 (where the inscription is unfortunately illegible) would have outlined this τὸ ὑδραγώγιον τὸ ποτέχο
[119x752]με νον. It is possible on the basis of the broad sense of the verb ἐπιμελέσομαι, in line 2, that it could be assigned to the overall supervision and expenses of the bathing installation, including the upkeep of the aqueduct. Consequently, it has been suggested that the inscription may commemorate the construction of the entire bathhouse complex including its aqueduct. Moreover, the finite verb ἐπιμελήθη appears in Greek inscriptions of the Roman period, occurring twice at Kourion to describe the action of a proconsul of Cyprus regarding construction which was either initiated or authorized and financed by the emperor.

The social significance of the Ini inscription secures it as one of the most enlightening discoveries regarding Roman bathing practices on Crete. The sources are, by their nature, generally restricted to male-dominated activities such as participation in local civic life (in the Panhellenion, in the Roman auxilia and state); however, the Ini inscription sheds light on the general participation of women in a daily activity. The Ini text indicates that Crete was very much in rhythm with general Roman trends and adhered to imperial

158 Hayden 2004a: 228.
162 Derks and Roymans 2009: 8.
163 Baldwin Bowsky’s work targets disproportionate representation in the scriptive record (1994: 26) and she addresses the common inclusion of women, admittedly those connected with high-class families, in prosopographical studies of Crete whereby those featuring in the Cretan inscriptions often display dual ethnicity judging from the Greek personal names that persist in the onomasticon (Baldwin Bowsky 2000: 66; 2006: 415).
regulations. The inscription, its findspot and associated architecture touches upon a broad range of Romanizing issues. The ambiguity of cultural identity manifested by Cretans with Cretan names administering the Roman institution of public bathing serves to illuminate the nature of Roman intervention in Cretan affairs. The buildings, to which the inscription refers, follow recognizably Roman architectural types. The edifices are notable in the landscape, being constructed predominantly of red brick, while the aqueduct approaching the bathhouse is dramatically elevated on an arcade. We are presented with a textual, administrative, and architectural testimony which illustrates the Roman method of permeating Cretan spheres of government which reveals that Crete was in harmony with the trends of Rome whereby almost the entire civic population (both male and female) partook on a daily basis in one of the most definitive Roman pursuits, that of bathing.  

### Conclusion

If the first century of Roman rule in Crete (c. 36 BC-AD 64) is marked by a noted conservatism, as is argued from an analysis of the ceramics and burial traditions at Knossos, this was followed by a Roman infiltration mediated by the local elites; an influence that initially emanated from Campania via the colony at Knossos, the capital at Gortyna, and other Cretan centres of influence. The rise of the villa in Roman Crete is representative of the nature of Roman mediation whereby the elite embraced Roman culture and promoted this affiliation throughout the wider populace. Romanization may have been initially spurred on by the wealthy elite who had much to gain but was clearly also palatable to the indigenous masses who benefited from the salubrious nature of Roman urbanity, as the public nature of the Ini inscription attests. That this format was successful is also complemented architecturally in the second century AD when both baths and aqueducts were widespread, synchronizing with a burst of construction throughout this century characteristic of Roman rule. Clusters of bathhouses appear at centres from the second century AD onwards, notably at Gortyna, Khania, Lappa, Eleutherna, Knossos and Kastelli Kissamou, while also appearing as isolated constructions throughout the Cretan landscape (see Figure 2).

The distributions of aqueducts and bathhouses on Crete display a slight predilection for the coast over the inland pre-Roman sites; however, to say that the Romans ignored the interior of the island, as has been previously implied, is unfounded. There was a significant number of flourishing inland Cretan cities; these include Ini, Lyttos, Gortyna, Lappa, Elyros, Eleutherna, Sybritos, and Axos with others of less renown at Plora, Vizari, Kato Asites, Ligortynos, and Oleros. Public bathing establishments in coastal locations are represented by Kastelli Kissamou, Khania, Aptera, Chersonisos, Lebena, Stavromenos Chamalevri, Knossos, Sitia, Kouphonisi, Hieraptyna, Plakias, Loutro, Souia, and Lissos. If location alone is considered, as opposed to quantity, there is not such a huge disparity between the number of sites with public bathhouses in the interior of the island and those located coastally; however, the coastal sites incorporate a multiplicity of bathhouses and if baths, rather than

164 Ducrey and van Effenterre 1973: 290.

cities, are counted, then the statistics lean favourably towards coastal sitings. It can be concluded that while the island demonstrates a high degree of Romanization percolating into the interior, there is still a slight majority of wealthy and developed Romanized centres along the coast.\footnote{166}

It was perhaps only in the second century AD that the architectural components of the island truly reflected its active and integral role in the Roman Empire. It is perhaps only at this stage that a broader influence becomes apparent, notably from Lycia and south-west Asia Minor and, to a lesser extent, central North Africa, demonstrated by the preference for the spacer pin heating system associated with small baths in these regions.\footnote{167} If many Cretan baths are relatively small in scale, their size is merely reflective of their associated population size (and, generally speaking, bath designs were highly sensitive to societal idiosyncrasies); by the same token, if the city expanded, so too did its baths, in both scale and number (as evidenced in the provincial capital at Gortyna).

The architecture emblematic of Roman influence throughout the Empire at its height was generally a hybrid of varying influences: indigenous and exotic, traditional and unconventional. Cretan bathhouses too present a balance in their design, blending local materials and building traditions with Roman architectural standards and templates, giving rise to a regional island style which, although undeniably Cretan in flavour, was overarching and distinctly Roman.

Acknowledgements

I owe a debt of gratitude to Sara Paton for her permission to include both her photograph of the cistern at Knossos and also for permission to include my photographs of the villa and bathsuite at Myrtos. I extend this thanks to Stavroula Apostolakou of the 24th Ephorate of Prehistoric and Classical Antiquities for permission to publish figure 3 and to both Sophia Preve and Giannis Christodoulakis, of the 25th Ephorate of Prehistoric and Classical Antiquities (Εφορεία Προϊστορικών και Κλασικών Αρχαιοτήτων), for permission to publish plate 4. I am deeply indebted to Edward Herring for all of his support and friendship while lecturing in NUI Galway and to Kathryn Lomas for patiently persevering with my last minute changes and editions.

\footnote{166} Moreover, if opus caementicium is identified in the cores taken from the harbour at Chersonisos by The Roman Maritime Concrete Study (ROMACONS), the harbour, its city, and Crete will be drawn into Roman economic trading spheres on an unforeseen level, linking it directly with the pozzolana factories operating from Rome to the Bay of Naples (the most famous near Pozzuoli, ancient Puteoli) (Brandon, \textit{et. al.} see webpage). The fact that the \textit{castellum} of the Chersonisos aqueduct is the largest cistern on the island (with a capacity of \textit{century} 7,018m$^3$ – Mandalaki 1999: 263) affirms the immense potential of the 14km-long aqueduct leading towards the port city (Oikonomaki 1986: 52). Mandalaki notes that parallels for the massive dimensions of the cisterns at Chersonisos could only be found outside Crete, in Italy, and North Africa (1999: 263).

\footnote{167} Kelly 2006b: 252.
Bibliography


Andreadaki-Vlazaki, Μ. 1983. ‘Μαράθι Στέρνων Κυδωνίας’ *ADelt* 38b²: 368.


Gerola, G. 1908. Monumenti Veneti dell’ Isola di Creta II. Venice.


Haggis, D. 1996b. ‘The port of Tholos in eastern Crete and the role of a Roman horreum along the Egyptian ‘Corn Route’’ OJA 15.2: 183-209.


Holland, L. B. 1944. ‘Colophon’ Hesperia 8: 91-171.


La Rosa, V. 1990. ‘Gortyna’ ADel 45b: 431.


Papadakis, N. P. 1979. ‘Μακρύ Γιαλός Σητείας’ *ADelt* 34b²: 406-09.


